SZABIST

PROSPECTUS 2023

Shaheed Zulfikar Ali Bhutto Institute of Science & Technology

Karachi - Islamabad - Larkana - Hyderabad - Gharo - Dubai

We just Don’t Work Hard

We Work Smart

SHAHEED ZULFIKAR ALI BHUTTO INSTITUTE OF SCIENCE & TECHNOLOGY

THE VISION

SZABIST aims to be a globally recognized institute for excellence in education, research, development, and distinction in service.

THE MISSION

SZABIST is committed to produce highly qualified professionals to:

- Meet national and global contemporary needs;
- Conduct cutting edge research and development;
- Provide hi-tech scientific and technological expertise;
- Meet current and future socio-economic challenges;
- Meet global citizenship responsibility.

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SHAHEED ZULFIKAR ALI BHUTTO

January 5, 1928 - April 4, 1979
Former Prime Minister of Pakistan

"We will give science and technology requirements the highest priority and our attention. To implement any program of scientific and technological development, the country needs to train scientific manpower. In this, the schools, colleges and universities have to play their role. I desire that vast number of people of Pakistan should acquire technological skills. I want first-class science in Pakistan because nothing less is acceptable. And I wish Pakistan to be increasingly self-reliant in all aspects of technology."

Address at the Inauguration Ceremony of Karachi Nuclear Power Plant, Karachi, Pakistan, November 28, 1972.

SHAHEED MOHTARMA BENAZIR BHUTTO

June 21, 1953 - December 27, 2007
Former Prime Minister of Pakistan,
Founding Chancellor SZABIST

"Technology and Communication have changed our world and are influencing a global culture. The ability to google information from anywhere in the world puts technology into the hands of even the most isolated rural communities in the developing world. The more people learn, the more they want to learn. The more they interact, the less likely they will be to fear the unknown. Just as democracy and educational exchange promote peace, the free flow of modern technology and communication promote peace."

Reconciliation: Islam, Democracy and the West, 2008.

CHANCELLOR'S MESSAGE

I welcome you to join the Shaheed Zulfikar Ali Bhutto Institute of Science and Technology (SZABIST), one of the most prestigious higher education institutions of Pakistan.

At SZABIST, we believe that innovative thoughts and high ideals teach the values of hard work, creativity and continuous learning. We prepare our students for professional careers, therefore, we offer a wide variety of programs including Management, Computer, Social and Media Sciences, Mechatronic Engineering, Biosciences, Education, Public Health and Law. The curriculum of each traditional and emerging program is approved by the Higher Education Commission (HEC), Pakistan and is taught by highly qualified and competent faculty members.

To achieve the mission of our founding Chancellor Shaheed Mohtarma Benazir Bhutto of providing opportunity for high quality tertiary education and research to the youth of Pakistan, SZABIST has a presence in Karachi, Islamabad, Larkana, Hyderabad, and an overseas campus in Dubai, UAE. We are also developing our campus at Gharo , which will inshAllah, open in Fall 2022.

At SZABIST, you will become part of a community that believes research is an integral part of academic excellence. We encourage participation in research and extra-curricular activities enabling our students to realize and nurture their true intellectual and professional potential.

SZABIST also offers numerous scholarships and financial assistance to make education accessible and affordable for all of its students. In order to augment students' learning experience and continuously improve the standard of education, the Institutional Research Department/Quality Enhancement Cell periodically assesses all programs to enhance the quality of education being imparted.

SZABIST is investing considerable resources for renovation and upgradation of its infrastructure and acquisition of additional physical facilities for its campuses. A "Library Hub" is also being established to fulfill emerging research and academic requirements.

As I welcome the new students, I encourage them to strive for excellence and while they equip themselves with marketable skills, they should actively work to promote the values of a tolerant, inclusive and pluralistic society.

The motto of SZABIST is to provide students the opportunity to experience university life in a way that helps them to discover themselves whilst focusing on their professional goals. So I wish you success in your years at SZABIST.

Dr. Azra Fazal Pechuho
Chancellor
SZABIST

PRESIDENT'S MESSAGE

It is my pleasure to welcome prospective students to Shaheed Zulfikar Ali Bhutto Institute of Science and Technology (SZABIST), a tertiary education institute known for its high quality and broad range of undergraduate and postgraduate programs and premium learning environment. SZABIST believes in encouraging students to discover their talent and strengths and achieve their educational, professional, and personal aspirations.

Over the past 25 years, SZABIST's national and international market reputation has been significantly enhanced. This is evident from the increased enrollment of about 11,000 students in its five Campuses-Karachi, Larkana, Hyderabad, Islamabad and Dubai (UAE).

SZABIST, guided by the vision of its Founding Chancellor, Shaheed Mohtarma Benazir Bhutto, is today a leading higher education institution for the youth of Pakistan aspiring for a high quality, relevant education. Our diversified academic portfolio offers a range of courses in 15 Bachelors, 16 Masters and 5 Doctoral level programs in the field of Management, Computing, Social Sciences, Media, Engineering, Biosciences, Public Health, Education and Law. This prospectus provides you with comprehensive information about our programs. The Institute, in compliance with the requirements of Higher Education Commission and Accreditation Councils, has developed curricula which not only relates to prevailing market demand but also prepares students with the knowledge and skills for the future needs of Pakistan's growing economy.

We are proud of our competent faculty and professionals who teach according to rigorous academic standards, evolving market requirements and provide a supportive environment for personal development. In addition to a wide spectrum of disciplines as presented in this Prospectus, SZABIST also offers exciting opportunities for co-curricular activities. Our Student Societies organize debates, drama, sports competitions, guest speaker sessions, workshops, and build networks with the Alumni and renowned companies for assistance in job placements.

Moreover, SZABIST was awarded 94% for its Quality Enhancement processes. Quality assurance measures are rigorously applied through tools such as Program Self-Assessment Reports, feedback of relevant stakeholders, publications and fulfilling documentation requirements of the regulatory authorities.

We hope you will become part of the SZABIST community of students and graduates and ultimately the global network of SZABIST alumni.

Shahnaz Wazir Ali
President
SZABIST

VICE PRESIDENT'S (ACADEMICS) MESSAGE

A great leader Mr. Nelson Mandela said: "Education is the most powerful weapon which you can use to change the world."

SZABIST has seen exponential growth in its programs, students, and physical infrastructure since its inception in 1995. This could be possible with the full support of its Management, especially of its worthy Chancellor, Dr. Azra Fazal Pechuho.

The whole purpose of education is to create "Analytical Minds". As a responsible institution, we just don't believe in classroom studies but believe in complete personality development. We, therefore, regularly conduct co-curricular and extracurricular activities through our various students' societies. We aim to prepare our students to be useful to society.

During the unfortunate COVID era, SZABIST has remained the most successful institution in the City, transforming from a physical to a virtual and hybrid system quickly to save the precious time of its students. We conducted virtual seminars and guest speeches to engage our students besides taking their regular classes to ensure our commitment to the students.

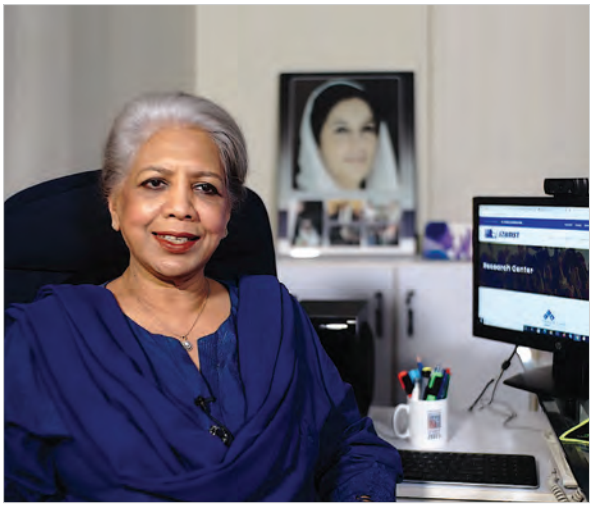
SZABIST now has six campuses in Karachi, Islamabad, Larkana, Hyderabad, Gharo, and Dubai. SZABIST is the only Pakistani institution having its campus in Dubai International Academic City since 2003, competing with the world's leading institutions. Karachi campus is the mother campus having more than 8000 students enrolled in its 40-plus academic programs in Management Sciences, Computer Science, Social Sciences, Media Science, Life Sciences, Education, Mechatronic Engineering, and Law. Our three-year LLB program is offered in collaboration with the University of London.

SZABIST programs comply with HEC recommended course plans and are accredited by regulatory bodies such as NBEAC, NCEAC, PEC, NACTE, and CIEC. The learning outcomes of the programs ensure to create critical & creative thinking, acquire problem-solving skills, and professionally handle all pedagogical tools. We are fully aware that a University without Research is like a "Body" without a "Soul"; therefore, we emphasize research activities at levels in our programs.

Finally, I thank all the newcomers for choosing SZABIST for their academic pursuits and wish them a happy stay during the entire period of their course of studies. I expect, as SZABISTian, you will show a high level of maturity through your conduct and actions.

Prof. Dr. M. Altaf Mukati
Vice President (Academics)
SZABIST

VICE PRESIDENT DEVELOPMENT AND FINANCE MESSAGE



Shaheed Zulfiqar Ali Bhutto Institute of Science and Technology initiated by Shaheed Mohtarma Benazir Bhutto and currently functioning under the able leadership of its Chancellor Dr. Azra Fazal Pechuho has emerged as a leading higher education institute that plays a vital role in producing highly qualified graduates.

Here we provide the environment, facilities, academic and professional experiences, and opportunities for research that aim at a creative, ethical, smart and holistic personality. With the commencement of the new academic year, students are encouraged to utilize the wide range of services and facilities, the events, programs, seminars, and festivals that will make their life at SZABIST interesting.

Get involved, make the most of your time and gain the experience that will make you the smart individual in demand at national and multinational firms within the country and abroad.

We are here to support you and welcome you to a fulfilling and interesting period at SZABIST.

Nasreen Haque
Vice President (Development and Finance)
SZABIST

VICE PRESIDENT'S (ADMINISTRATION) MESSAGE

I am delighted to welcome you to Shaheed Zulfikar Ali Bhutto Institute of Science and Technology. At SZABIST, you will become part of a strong and supportive community that values academic excellence and diversity.

The unfailing dedication and vision of Shaheed Mohtarma Benazir Bhutto has led SZABIST to grow into an exceptionally well established and well reputed institution. Today SZABIST has developed into a strong multidisciplinary institution with campuses in Karachi, Hyderabad, Larkana, Islamabad and Dubai.

Over the years, Shaheed Zulfikar Ali Bhutto Institute of Science and Technology (SZABIST) has excelled in the field of education and has produced some of the most well qualified and outstanding graduates.

We at SZABIST are dedicated not just to the purpose of education and learning, but also to assisting and guiding students to adjust to university life and to discover their skills and talents. We encourage students to promote a campus environment that is respectful, supportive and safe.

SZABIST is truly proud of the role students play in the life of the institution and it is hoped that you will also play an important part.

It is hoped that the Prospectus 2022 will serve as a useful guide in planning out your academic journey and that each of you have a well learning and fruitful experience here at SZABIST.

With best wishes

Imtiaz Kazi
Vice President Administration
SZABIST

INTRODUCTION

Shaheed Zulfikar Ali Bhutto Institute of Science and Technology (SZABIST) is a chartered institute of Pakistan established through a Legislative Act of Sindh Assembly (Sindh Act No. XI of 1995). It is highly ranked, approved and recognized by the Higher Education Commission (HEC) Pakistan as a degree awarding institution. All the programs offered at SZABIST are consistent with the guidelines laid by HEC and other regulatory bodies.

SZABIST comprises five campuses located in Karachi, Hyderabad, Larkana, Islamabad and Dubai with a current student population of over 18,000, collectively. Altogether over 24,000 talented graduates have been proudly awarded degrees by all campuses of SZABIST. Our alumni are sought by national and multinational organizations and hold key positions in several reputable firms.

SZABIST offers undergraduate, graduate and post graduate degrees in 5 different disciplines: Faculty of Management Sciences, Faculty of Computing and Engineering Sciences, Media Sciences, Faculty of Education and Social Sciences, and Faculty of Life Sciences. In addition, SZABIST offers LLB program, CertHE (Law), and BABS program as external programs in affiliation with University of London and Coventry University, UK, respectively.

SZABIST is ranked as one of the most reputed universities by Higher Education Commission (HEC), Pakistan and Chartered Inspection and Evaluation Committee (CIEC) Sindh, Pakistan. All programs of SZABIST are conducted under strict compliance of the relevant regulatory bodies such as NBEAC, NCEAC, NACTE, PEC and KHDA Dubai (UAE). Since 2012, the SZABIST-IR/QEC has been ranked in the highest “W” Category in the yearly quantitative report by the Quality Assurance Agency (QAA) of HEC, Pakistan.

The Institute has signed MoUs with various reputable and distinguished organizations and institutions such as Istanbul Medipol University, Turkey; University of London, UK; ICRC, Aman Foundation and JS Bank.

SZABIST Karachi Campus is situated in the prime location of Clifton Block 5 (campus units: 79, 99, 100, 153, 154, 172/1, 172/2). Moreover, the new SZABIST Gharo campus is constructed on the main National Highway, a 40 minutes-drive, from Karachi Airport. Plans of initiating admissions campaign for SZABIST Gharo campus will be announced soon.

SZABIST is proud to offer education par excellence in the areas that are crucial for Pakistan's socio-economic development.

INTRODUCTION

PROGRAMS & CURRICULA

DEGREES OFFERED

All five campuses of SZABIST offer various degree programs in different disciplines so please refer to page 96 for details.

Bachelor of Business Administration (BBA)

SZABIST offers a four-year (eight semesters) BBA degree program of 144 credit hours. This is SZABIST's flagship program. For the BBA program, students are required to complete 46 courses and 03 credit hours Business Project & a 03 credit hours Community Service Project. The program includes 42 compulsory courses and 4 Program Electives courses from Management, Marketing, Finance, Business Analytics, IT or Supply Chain Management. To obtain the BBA degree, students have to complete 144 credit hours and six-week internship. Maximum time limit to complete the BBA degree is six years. BBA program is an ACCA accredited program; those who complete BBA from SZABIST, Karachi, will get an exemption in 06 out of 09 ACCA Foundation papers (F1, F2, F3, F5, F7 and F9). BBA Program has been accredited by National Business Education Accreditation Council (NBEAC) which is an independent professional council established by HEC and affiliated with Chartered Financial Analyst (CFA) Institute.

Bachelor of Science in Accounting & Finance (BS A&F)

SZABIST offers a four-year (eight semesters) Bachelor of Science (Accounting & Finance) program, consisting of 46 Courses (six courses per semester) and a 6 credit hours Research Project. (to be offered over last two semester). Students have to complete 144 credit hours along with six weeks of internship to obtain the BS Accounting & Finance (BS A & F) degree. The maximum time limit to complete the degree program is six years.

Graduates of BS (A & F) program will get exemptions in nine papers of both Institute of Chartered Accountants of Pakistan (ICAP) and Association of Chartered Certified Accountants (ACCA), UK.

SZABIST also offers 2.5-year Bachelor of Science (Accounting & Finance) program exclusively for CAF qualified students of the Institute of Chartered Accountants of Pakistan (ICAP). CAF qualified students are exempted 60 credit hours (20 course) of course work and have to complete 78 credit hours (26 courses) of course work and a 6 credit hours Research Project (to be offered over last two semester).

Bachelor of Arts (Hons) in Business Studies (BABS)

SZABIST offers a three-year BA (Hons) degree in Business Studies from Coventry University, UK. Students who complete two years at SZABIST will proceed to complete the third year from Coventry University UK and earn an International degree. Students can also complete BABS degree at SZABIST by opting for 3rd & 4th year of BABS program at SZABIST, Karachi. Maximum time limit to complete the internal BABS degree is six years with a mandatory requirement of completion of a minimum six weeks of internship.

Bachelor of Science in Entrepreneurship (BSE)

SZABIST offers a four-year (eight semesters) BS Entrepreneurship degree program of 144 credit hours. For the BS Entrepreneurship program, the students are required to complete 45 courses and 9 credit hours of Capstone Projects. The courses include 41 compulsory courses and 4 electives. To obtain the BS Entrepreneurship degree, students have to complete 144 credit hours and 2 Apprenticeships. Maximum time limit to complete the BS in Entrepreneurship (BSE) degree is six years.

Bachelor of Science in Computer Science (BS CS)

SZABIST offers a four-year (eight semesters) BS Computer Science degree program which is accredited by National Computing Education & Accreditation Council, (NCEAC). The program covers a wide range of courses in core Computer Science, Information Technology and Software Engineering. The program is essentially a full time day program and consists of 41 courses (five courses per semester) with a total of 130 credit hours. The complete course plan includes 8 technical electives and 4 university electives. These 8 technical electives provide intensive learning in the diversified areas of Computer Science and allied disciplines. Internship opportunities are provided to complete degree requirement. The maximum time limit to complete the degree program is six years.

Bachelor of Science in Artificial Intelligence (BS AI)

BSAI program is offered by the Department of Robotics and Artificial Intelligence. The BSAI is a 4 year program and consists of 41 courses with a total of 130 credit hours. The Internship opportunities are provided to complete degree requirement. BSAI is a full time day program that covers the emerging dimensions of Machine Learning, Deep Learning, Explainable AI, Evolutionary Computing, Computer Vision, Software Engineering, Natural Language Processing etc. The program comprises of 39 credit hours of Core Computing course, 18 credit hours of Computer Science Core courses, 19 credit hours of General Education courses, 18 credit hours of Artificial Intelligence Core courses, and 36 credit hours of Elective courses. The Maximum duration of the program is six years.

PROGRAMS & CURRICULA

Bachelor of Science in Software Engineering (BS SE)

The BS Software Engineering program is offered through a trained foreign qualified faculty. It consists of 42 courses with a total of 130 credits hours. The maximum duration to complete the degree is six years. The core courses focus on the fundamentals of software engineering followed by a broader range of courses through which students can choose to specialize their learning. The BS Software Engineering curriculum covers all important facets of the discipline of software engineering including project management, requirements analysis, software architecture, software development, and quality assurance. Throughout the degree program, students are exposed to the theory, techniques, tools, and practicalities of software engineering.

Bachelor of Engineering in Mechatronic Engineering (BE ME)

SZABIST offers a four-year (eight semesters) BE-Mechatronics Engineering degree program which is accreditated Under Level-II (i.e. OBE- Outcome Based Education) by Pakistan Engineering Council. This program has received 7-Stars i.e., World Class rating by Chartered Inspection & Evaluation Committee (CIEC) Sindh. SZABIST is a pioneer university to offer this program at undergraduate level in the province of Sindh. The program is essentially a day program and consists of 49 courses with a total of 140 credit hours (all electives and certain courses may be offered in the evening). The program is supported through well-equipped state-of-the-art laboratories. Internship opportunities are provided to meet degree requirement. The maximum time limit to complete the BE-ME degree program is seven years.

Bachelor of Media Sciences (BMS)

The Faculty of Media Sciences at SZABIST offers a comprehensive 4-year Bachelor of Media Science degree with streams in Film and Television production, Advertising Strategy & Design, and Journalism. To earn an undergraduate degree, students must enroll in and successfully complete a total of 136 credit hours which include 44 courses, a 6-credit hours thesis, and an internship (Forty-four courses include: 34 core courses, 7 from the stream of specialization requirements, i.e. Film and Television production, or Advertising Strategy & Design, or Journalism and 3 electives). All students must complete their degree within six years.

Bachelor of Science in Social Sciences (BS SS)

SZABIST offers a four-year (eight semesters) BS Social Sciences degree with majors in Psychology, Sindh Studies, Sociology, Economics, and International Relations. BS Program is essentially day program and consists of 46 courses (six courses per semester) including research project (I&II) with a total of 142 credit hours. The maximum time limit to complete the BS degree is six years.

Bachelor of Science in Biosciences (BS Bio)

BS Biosciences at SZABIST is a four-year program spread over eight semesters and consists of 136 credit hours of teaching (44 courses), an internship of at least six weeks, and a research project of 6 credit hours. The maximum time limit to complete the BS degree is six years.

Bachelor of Science in Biotechnology (BS Biotech)

BS Biotechnology at SZABIST is a four-year program spread over eight semesters and consists of 136 credit hours of teaching (44 courses), an internship of at least six weeks, and a research project of 6 credit hours. The maximum time limit to complete the BS degree is six years.

Bachelor of Science in Public Health (BS PH)

BS Public Health at SZABIST is a four-year program spread over eight semesters and consists of 130 credit hours of teaching (42 courses), an internship of at least six weeks, and a research report of 6 credit hours. The maximum time limit to complete the BS degree is six years.

Bachelors of Science in Educational Psychology (BS EP)

The BS Educational Psychology is a 4 year degree program, consisted of 144 credit hours with 48 courses, in which there are 12 major courses (3 credit hours each) and a 6 credit hours research project. The maximum time limit to complete the degree is six years.

Diploma in Early Childhood Education and Development (ECED)

The proposed diploma in Early Childhood Education and Development (ECED is a year-long program spread over 3 semesters with 10 courses and 30 credit hours.

Master of Advertising (MoA)

The Faculty of Media Sciences at SZABIST offers an evening, one year Master's degree program in Advertising providing students with a comprehensive training through courses that prepare them to engage in various career options in the advertising industry. To be awarded a Master of Advertising degree, students are required to complete a total of 30 credit hours which includes 10 courses (10 courses include: 7 core courses and 3 electives). All students must complete their degree within four years.

PROGRAMS & CURRICULA

Executive Master of Business Administration (EMBA)

SZABIST offers a two-year EMBA degree program for executives and middle-level managers striving for excellence and greater challenges in their careers. This distinct program is specifically designed for those executives who aim to improve their efficiency and strategic thinking. The individuals will be able to leverage their rich work experience through our curriculum, interactive sessions, conferences, symposia, and a wide corporate network. The EMBA program is spread over four semesters and consists of 66 credit hours. Twenty courses (60 credit hours), one Business Project (3 credit), and one Research Project (3 credit) are required to graduate. The maximum time limit to complete the EMBA degree is four years.

Masters of Business Administration (MBA)

MBA program has been designed to impart quality professional knowledge and understanding of modern management tools, leadership, entrepreneurial skills, and managerial and communication competencies. MBA Program has been accredited by National Business Education Accreditation Council (NBEAC) which is an independent professional council established by Higher Education Commission.

SZABIST offers both MBA Day and Evening programs with specialization in Marketing, Finance, Management, Human Resource Management, Supply Chain Management, Banking and MIS. The maximum duration to complete MBA degree program is four years.

MBA program is intended for students having a four-year bachelor degree (e.g. BS-CS, BE, BBA etc.) or 16 years of education in different disciplines. The duration to complete this program is two years with 72 credit hours. Twenty-two courses (66 credit hours) and 6 credit hours of Research Project OR Thesis spread over two semesters (03+03) are required to complete the program. Students with BBA or equivalent qualification are exempted 36 credit hours of course work and they are required to complete remaining 36 credit hours in 1.5 years. Students are also required to undertake a six week duration of internship during summer.

CILT (UK) Level 5 Professional Diploma in Logistic & Transport

The Chartered Institute of Logistics & Transport(CILT) is the leading professional body associated with logistics and transport, having over 35,000 members in over 100 countries worldwide. SZABIST Karachi has signed a Memorandum of Understanding (MOU) with CILT-UK to offer a Level 5 Professional Diploma. Now, Business and Engineering Professionals and students have the opportunity of opting for International Professional Diploma in Logistics and Transport by doing five courses. The Professional Diploma fee is to be paid by the student.

Master of Project Management (MPM)

The Master of Project Management (MPM) is designed to enable individuals to manage complex projects through modern project management approaches. MPM is a one-year evening program comprising 30 credit hours spread over two semesters. A total of 10 courses are required to graduate. The maximum time limit to complete the MPM degree is four years.

Master of Science in Project Management (MSPM)

SZABIST offers MS in Project Management (MSPM) program which is equivalent to MPhil. The program lays the foundation for students who are planning to pursue doctoral studies. This program offers two streams for MSPM. The first stream is course work-based and the second is research-based. In course work-based stream, students are required to complete 10 courses of 03 credit hours each. In research based stream, the students are required to complete 08 courses of 03 credits hours each (24 credit hours) and two Independent Research Studies (IRS) or a Thesis (06 Credit Hours). In either stream, students are required to complete 30 credit hours. The maximum time limit to complete the MSPM degree is four years and the minimum time to complete is 1.5/2 years. All MSPM Students are required to clear GRE, GAT General test or HAT relevant with a minimum 50% score.

Master of Science in Management Sciences (MS MS)

SZABIST offers MS degree with concentration in the specialized areas of Human Resource Management, Marketing, Finance and Business Analytics. The MS program is an evening program and all classes are held during week days. There are two streams available for MS. One Stream is by Course Work and other one is by Research Work. In Course Work Stream, the student is required to complete 10 courses of 3 credit hours each. In Research Work Stream, the student is required to complete 8 Courses and Two IRS OR one Thesis. In both the streams, 30 credit hours are to be completed. The time limit to earn an MS degree is from 1.5 to 4 years. As per HEC guidelines, all MS students are required to clear GAT General test or HAT relevant with minimum 50% score.

PROGRAMS & CURRICULA

Master of Science in Social Sciences (MS SS)

SZABIST's Department of Social Sciences offers MS Social Sciences degree with specializations in International Relations, Economics, Psychology and Sociology.

It is an evening program only and consists of 10 courses and/or a Thesis/Independent Research Studies of 30 credit hours. The maximum time limit to complete the MS degree is four years.

There are two streams available for MS. One stream is course work based stream and other one is research based stream. In Course Work Stream, the student is required to complete 10 courses of 3 credit hours each. In the Research Based Stream, the student is required to complete 8 Courses (24 Credit Hours) and two IRS (6 Credit Hours) OR one thesis (6 Credit Hours). In both streams, 30 Credit hours are to be completed. The time limit to earn an MS degree is from 1.5 to 4 years. As per HEC guidelines, all MS students are required to clear GRE or GAT General test or HAT relevant with minimum 50% score.

Master of Science in Public Health (MSPH)

MSPH at SZABIST is a two-year program distributed into two streams i.e., MSPH (36 credit hours) and MSPH (60 credit hours). For MSPH (36 credit hours), the curriculum includes 10 courses of 3 credit hours each and a research project (Thesis) of 6 credit hours or 2 IRS (3 credit hours each). For MSPH (60 credit hours), the curriculum includes 18 courses of 3 credit hours each and a research project (thesis) of 6 credit hours or 2 IRS (3 credit hours each). All MSPH students can also take two additional courses in lieu of Thesis in order to complete total credit hours. The maximum time limit to complete the MSPH degree is four years. All MSPH students (36 & 60) are required to clear GRE or GAT General/HAT relevant test with minimum 50% score.

Master of Science in Biosciences (MS Bio)

MS Biosciences at SZABIST is a two-year program spread over four semesters and consists 30 credit hours. The curriculum includes 8 courses of 3 credit hours each and research project (Thesis) of six credit hours or 2 IRS. Students can also take two additional courses in lieu of Thesis in order to complete total credit hours. The maximum time limit to complete the MS degree is four years. All MS Bio students are required to clear GRE or GAT General/HAT relevant test with minimum 50% score.

Master of Science in Biotechnology (MS Biotech)

MS Biotechnology at SZABIST is a two-year program spread over four semesters and consists 30 credit hours. The curriculum includes 8 courses of 3 credit hours each and research project (Thesis) of six credit hours or 2 IRS. Students can also take two additional courses in lieu of Thesis in order to complete total credit hours. The maximum time limit to complete the MS degree is four years. All MS Biotech students are required to clear GRE or GAT General/HAT relevant test with minimum 50% score.

Master of Science in Educational Leadership and Management (MS ELM)

The MS in Educational Leadership and Management is a 1.5-2 years program. It is a 30 Credit hours program. There are two streams available for MS ELM. One Stream is Course Work Based Stream and the other one is Research Based Stream. In Course Work Stream, the student is required to complete 10 courses of 3 credit hours each. In the Research Based Stream, the student is required to complete 8 Courses (24 Credit Hours) and Two Independent Research Study Courses (6 Credit Hours) OR One Thesis (6 Credit Hours). In both the streams, 30 credit hours are to be completed. The time limit to earn a MS degree is from 1.5 to 4 years. The program is accredited by National Accreditation Council for Teacher Education (NACTE).

The students will have the opportunity to specialize in the fields of: School Administration/ Educational Leadership, Sociology of Education, Educational Policy, Testing and Evaluation, Teacher Education, Professional Development, Guidance & Counseling, Curriculum Development, Technology Integration in Education, Early Childhood Education, Higher Education Studies, Educational Psychology and Child Development.
All MS ELM students are required to clear GAT General/HAT relevant test with minimum 50% score.

Master of Science in Computer Science (MS CS)

Master of Science in Computer Science (MS CS) SZABIST offers MS (CS) degree in three domains: Core Computer Science area and in two specialization tracks, i.e., Software Engineering (SE) and Networks & Security (N&S). Students are required to complete 3 focused courses in any specific domain.

The program is of 2-year duration and is offered in the evening. It requires 33 credit hours to complete. Student has the option to complete MS through course work only or with research. If student opts for course work only, he/she is required to complete 11 courses of 3 credit hours

each. Else, the student is required to complete 9 Courses (27 credit hours) and Two Independent Research Study (6 credit hours) OR One Thesis (6 credit hours).

Eligibility for this program is a 4-year BS (CS) or 2-year MCS degree from a recognized institution. The candidates with a 4-year professional degree (BE, MSc, etc.) may also apply but will require to complete deficiency conversion courses (up to 12 credit hours courses to be determined in consultation with Program Manager). The programs such as BSCS, BSIT, BSSE, BSCE & BSCSE shall not require any extra courses. As per HEC guidelines, all MS students are required to clear GRE or GAT General test or HAT relevant with minimum 50% score. The maximum time limit to complete the MS degree is four years.

Master of Science in Cyber Security (MS CYS)

The MS (Cyber Security) program is of 2-years duration offered in the evening. It requires 33 credit hours, including 4 core courses (3 Credits) and 5 elective courses (3 Credits). To earn MS (Cyber Security) degree, the student has to complete a thesis (2 x 3 Credits). The maximum time limit to complete the MS (Cyber Security) degree is 4 years.

Program Objectives

The cyber security program is planned to satisfy the increasing security intensive needs of private and public sector organizations. In this program, students will equip with the various skills and techniques which are important for securing IT networks and systems. Students having a strong background in Mathematics, Computer Science, Engineering or equivalent are the potential candidates for the Master of Science Cyber Security program. Upon successful completion of the degree program, students will be able to use the latest tools and techniques of cyber security. After graduating from this program, students may have a potential career in various disciplines such as the telecommunications sector, software industry, intelligence agencies, e-businesses, e-government, banking, financial technologies, health care, and insurance. The goal of the program is to enable students to apply scientific and technological development in building a secure information society. The aim is to make technology-driven solutions to secure cyberspace. Moreover, to allow students to have hands-on digital forensics experience, this deals with the investigation and recovery of information found in digital devices to identify computer-based crime. The area is becoming critical for both data security and law enforcement. MS in Cyber Security offers strong expertise for a career in securing and managing the cyber society.

Master of Science in Data Science (MSDS)

The MSDS program is offered by the Department of Robotics and Artificial Intelligence. It is a two-year evening program that requires 30 credit hours to be completed. The program comprises of 03 core courses, 02 specialization courses in data science, and 3 Elective courses. In-addition, the student has an option to complete the MSDS through course work OR with research work. If the student opts for coursework stream, he/she is required to compete additional 02 courses of 03 Credit hours each. Alternatively, if the student opts to complete MSDS by research work than he/she must opt 02 Independent Research Study (IRS), 06 credit hours OR a research Thesis, 06 credit hours. The maximum time limit to complete the MSDS degree is 4 years.

Master of Science in Mechatronic Engineering (MS ME)

SZABIST offers MS (Mechatronic Engineering) degree with two specializations namely: Robotics & Industrial automation and Smart Electromechanical Systems. The program is of 2-year duration and is offered in the evening. In addition to five core courses, students are required to complete 3 elective courses of their choice of specialization. Although students are encouraged to undertake Thesis/Research Project of 6 credit hours but they also have an option to undertake two elective courses in lieu of the Thesis/Research Project in their choice of specialization. The maximum time limit to complete the MS degree is four years. As per HEC guidelines, all MS students are required to clear GRE or GAT General/HAT relevant test with minimum 50% score.

Master of Media Science (MMS)

Faculty of Media Science at SZABIST offers an evening, 18 months Master's degree in Media Science. Students enrolling in this program will be offered to select any one of the 3 streams of specialization;

(1) Media Production and Design stream– primarily for media professionals and middle management of production houses and teams engaged in media houses and are hampered in their careers because of lack of knowledge and understanding of production technique skills.

(2) Digital Journalism & Global Communication stream is offered for all who want to develop an in-depth understanding of journalistic practices and are interested

in specializing in analytical skills related to both print and electronic media;

(3) Fashion Media & Digital Communication stream is for professionals who want to join the growing Fashion media and merchandising industry in Pakistan, in addition to courses that help in managing public relations and communication strategy of companies and nonprofits.

To be awarded a Master of Media Science degree, students are required to complete 30 credit hours through Coursework: 10 courses (4 core courses and 6 electives) or Thesis work: 4 core courses, 4 electives and Thesis (6 credit hours). All students must complete their degree within four years.

Doctor of Philosophy

SZABIST offers PhD degree in Management Sciences, Computing, Educational Leadership and Management, Social Sciences, and Biosciences in strict adherence to the HEC guidelines.

The admission requirement for PhD is minimum 17.5 years of education, GAT Subject 60% or above score and fulfilling the admission requirements of SZABIST. For Ph.D. Biosciences, SZABIST's own GAT Subject test has to be cleared with 70% score. After admission, the student is required to complete the course work of 18 credit hours that includes five courses and one Independent Research Study. Maximum course load during semester is 9 credit hours. After course work, the student is required to pass Comprehensive Examination within two attempts. The dissertation carrying a weight of 30 credit hours is required to be completed prior to submitting the dissertation, the student is required to publish a research paper in HEC recognized journal. The dissertation is sent for evaluation to two external evaluators in technologically advanced countries. The time limit to earn a PhD degree is from 3 to 8 years.

PhD Computing can be done in various specialized areas related to pure or applied Computer Sciences. The specializations include but not limited to Database Management Systems, Management Information Systems, Data Warehousing, Data Mining, Networking & Communication, Business Intelligence, Process Modeling, Telecommunication, Mobile Communication, Mobile Computing, Technology Management, Artificial Intelligence, Software Engineering, Agent Systems, Speech Recognition, Multimedia Systems, HCI, E-Business, Mechatronic, Machine Vision, Image Processing and any other area which falls in the purview of computer sciences or computing.

In Social Sciences, specializations include International Relations, Economics, Psychology and Sociology.

The PhD in Educational Leadership and Management is a 3 year program spread over six semesters. It is a 48 credit hour program comprising 5 courses (15 credit hours), 1 Independent Research Study (3 credit hours), and a Dissertation (30 credit hours).

Grading Plan

The following Letter Grade Plan is followed at SZABIST:

Letter	Range	Grade Point	Degree Requirement
A+	90 – 100	4.00	
A	85 – 89	3.75	
A-	80 – 84	3.50	
B+	75 – 79	3.25	
B	70 – 74	3.00	PhD Degree Requirement
B-	66 – 69	2.75	MS Degree Requirement
C+	63 – 65	2.50	Master's Degree Requirement
C	60 – 62	2.00	Undergraduate Degree Requirement
C-	55 – 59	1.50	
F	< 55	0.00	

ADMISSION REQUIREMENTS

NOTE:

- All applicants will be required to appear in an entrance test and interview/group discussion held by SZABIST.
- Conversion of A-Level grades or equivalent must be 50% and above for all undergraduate programs except Life Sciences.
- Equivalency from Inter Board Committee of Chairmen (IBCC) is mandatory for O & A Levels/High School Diploma/IB Diploma or equivalent.
- High School Diploma or International Baccalaureate (IB) students appearing for examination from Pakistan shall have to pass Islamiat, Pakistan Studies & Urdu either with O Levels or SSC.
- Verification of last degree from Higher Education Commission of Pakistan (HEC) is mandatory for all Masters, MS, & PhD students.
- Equivalency of international degrees from Higher Education Commission of Pakistan (HEC) is mandatory for all Masters, MS, & PhD students.
- Students waiting for results can also apply.
- Admission of Foreign students are subject to clearance from the relevant Agencies/NoC from HEC.

BACHELOR DEGREE PROGRAMS

BBA/BABS/BS Programs

For admission in the BBA/BABS/BS programs, the candidate must have completed O-Levels (minimum 8 subjects including 5 compulsory subjects; English, Urdu, Maths, Islamiat & Pakistan Studies) and A-levels (minimum 3 Subjects)/12th Grade/Intermediate with minimum 50% marks or equivalent from a recognized institution.

For BS Computer Science and Software Engineering, candidates with mathematical background will be preferred.

BS Artificial Intelligence

The candidate must have completed Intermediate / A-levels (minimum 3 subjects) or equivalent with minimum 50 % marks (along with Mathematics subject) and Matric / O-Levels (minimum 8 subjects including 5 compulsory subjects; English, Urdu, Maths, Islamiat & Pakistan Studies).

Candidates with pre-medical background must have to pass deficiency courses of Mathematics of 6 credit hours in first two semesters.

BS Biosciences, BS Biotechnology, and BS Public Health

Candidates are required to have 45% marks in Intermediate (FSc) or O-Levels (minimum 8 subjects including 5 compulsory subjects; English, Urdu, Maths, Islamiat & Pakistan Studies) and A-levels (minimum 3 subjects including any two of these subjects; Biology, Chemistry, and Physics).

BE Mechatronic

The candidate must have completed Intermediate / A-levels (minimum 3 subjects) or equivalent with a combination of (Physics, Chemistry and Mathematics) in Pre-Engineering and Matric / O-Levels (minimum 8 subjects including 5 compulsory subjects; English, Urdu, Maths, Islamiat & Pakistan Studies) in Science group with minimum 60% marks. Equivalency of grades for the candidates having Cambridge High School Certificate with Mathematics, Physics and Chemistry subjects are obtained as follows:

A-Level Grade	Equivalent Intermediate %
A	85
B	75
C	65
D	55
E	45

Candidates with DAE (Mechanical/ Electronics/Electrical /Instrumentation/Automation) having at least 60% aggregate marks from an institute recognized by the HEC can also apply.

Minimum 60% aggregate marks each in Matriculation and in Intermediate/equivalent exams.

DIPLOMA PROGRAMS

Diploma in Early Childhood Education and Development (ECED)

For admission in the BBA/BABS/BS programs, the candidate must have completed O-Levels (minimum 8 subjects including 5 compulsory subjects; English, Urdu, Maths, Islamiat & Pakistan Studies) and A-levels (minimum 3 Subjects)/12th Grade/Intermediate with minimum 50% marks or equivalent from a recognized institution.

ADMISSION REQUIREMENTS

MASTERS DEGREE PROGRAMS

Master of Advertising (MoA)

Students with a 4-year undergraduate degree or 16 years of education with minimum 50% marks/2 CGPA from a university recognized by the HEC are eligible to apply.

Master of Business Administration (MBA)

For admission in the MBA program, the candidate must possess a 4 years bachelor degree with minimum 2.5 CGPA or 16 years of education with minimum 55% marks from a university recognized by the HEC.

Master of Project Management (MPM)

For admission in the MPM program, the applicant must possess a minimum of sixteen years of education/4-year Bachelor/Masters degree from an HEC recognized educational institute with a minimum of 55% marks/2.5 CGPA.

Executive MBA

For admission in the EMBA program, the candidate must possess 16-year education or a 4-year bachelor degree with a minimum of 55% marks/ 2.50 CGPA from a university recognized by the Higher Education Commission (HEC) in any field of study with 3 years of professional work experience (verifiable) at some well-known organization. This requirement is necessary to seek admission in this program.

Master of Science - Project Management (MS PM)

For admission in the MSPM program, the applicant must possess a minimum of 16 years of education/4-year Bachelor/Master degree with a minimum of 2.5 CGPA or a minimum 55% marks from an HEC recognized university. Candidates are also required to pass GAT General/HAT relevant with a minimum 50% score.

Master of Science in Management Sciences (MS MS)

For admission to MS Management Sciences candidates must possess 16 years of relevant education with minimum 55% marks/2.5 CGPA from a university recognized by HEC. GAT (General) or HAT relevant is mandatory for MS students with minimum 50% score.

Master of Media Science (MMS)

For admission to the MMS, Program candidates must possess 16 years of education with a minimum 2nd division /2.00 CGPA from an HEC recognized university in a related field of Media, advertising, communication design, applied or performance arts.

Candidates with 4-year non-media-related discipline degrees (BBA, BSCS, MSc., MCom., MA, etc.) may apply but will require to complete deficiency conversion courses (Up to 12 credit hours to be determined in consultation with Admission Committee). Students need to complete remedial/deficiency courses (up to 12 credits hours) in the first semester before they will be permitted to continue regular courses. This semester will be considered a zero semester and the credits will not contribute to the CGPA. These courses will be mentioned on the transcript with a zero GPA. The length of the completion of the degree will increase by one semester though the maximum limit of four years of degree completion will remain the same.

Students must complete GAT or HAT relevant with a minimum of 50% score.

Master of Science - Mechatronic Engineering (MS ME)

For admissions in the MS Mechatronic Engineering program, candidates must possess BE in Mechatronics/ Mechanical/ Electronics/Electrical/Telecommunication/Industrial/Manufacturing/Aerospace/Avionics / Automotive / Artificial Intelligence with minimum 55% marks/2.0 CGPA from a university recognized by HEC. Bachelor of Engineering degree must be accredited by PEC. GAT (General) or HAT relevant is mandatory for MS students with minimum 50% score.

Master of Science in Biosciences (MS Bio) and Master of Science in Biotechnology (MS Biotech)

For admissions in the MS Biosciences program, candidates must possess 16 years of education in any field of life/biological sciences with minimum 50% marks/2.0 CGPA from a university recognized by HEC. GAT General/HAT relevant is mandatory for MS students with minimum 50% score.

Master of Science in Public Health (MSPH)

For admissions in the MSPH program, the candidate must have 16 years of education with minimum 50% marks/2.0 CGPA from a university recognized by HEC.

Following candidates will be eligible to take MSPH Program of 36 credit hours:

MBBS/BDS/MD/BSc Nursing 4 Years/DVM/BSc Paramedics-4 years/BSPH/Pharm D/BS Physiotherapy and BS Biological & Life Sciences/Equivalent.

ADMISSION REQUIREMENTS

Following degree holders will be eligible to take MSPH of 60 credit hours:

Masters in Environmental Sciences/Business Administration/Nutrition and Social Sciences (Sociology/Psychology/Anthropology)/Equivalent.

GAT General/HAT relevant is mandatory for MSPH students with minimum 50% score.

Master of Science in Computer Science and Master of Science in Cyber Security

For admission to MSCS & MS CSY program, candidates must possess 16 years of relevant education with minimum 60% marks/2.0 CGPA from a university recognized by HEC. GAT (General) or HAT relevant is mandatory for MS students with minimum 50% score.

Master of Science in Data Science (MSDS)

For admission in MSDS program candidates must possess 16 years of relevant education with a minimum of 50% marks / 2.0 CGPA from a university / Institute recognized by HEC. Eligibility for this program is a 4-year BS (CS).

Students with 16 years of education in the following domains (Information Technology, Software Engineering, Computer Engineering, Electrical Engineering, Statistics, or Mathematics) are also eligible to apply provided that they might have to take deficiency courses.

GAT (General) or HAT relevant is mandatory for MS students with a minimum 50% score.

MS SS (International Relations, Economics, Psychology & Sociology)

For admission in MS SS (International Relations, Economics, Psychology & Sociology) program, candidates must possess 16 years of relevant education with minimum 2nd Division/2.0 CGPA from a university recognized by HEC.

GAT (General)/HAT relevant is mandatory for MS students with minimum 50% score.

Master of Science - Educational Leadership and Management (MS ELM)

For admission in MS ELM program, the candidate must possess 16-years of education in the discipline of education with minimum second division/2.0 CGPA from an HEC recognized institution. Or 16-years of Education an any other field may apply but will require to complete six deficiency courses.

GAT General/HAT relevant with minimum 50% score is also required.

DOCTORAL DEGREE PROGRAMS

Admission Requirements

A candidate with MA/MS/MBA/MPhil or any other equivalent degree with minimum 17.5 years of formal education in the relevant field from HEC recognized local or foreign university may apply for direct admission in a PhD program. To apply for admission in PhD program, the candidate must have obtained minimum of 3.0 CGPA, and have passed GRE/Equivalent/GAT (subject) with minimum 60% score. Clearing GAT (Subjective)/GRE/Equivalent is mandatory for admission in PhD. Student would have to appear before admission committee for interview.

For Ph.D. Biosciences, SZABIST's own GAT Subject test has to be cleared with 70% score at the time of admission.

A student may be asked to complete other pre-requisite /deficiency courses/thesis before taking the required courses. The decision on number of pre-requisite courses is taken by the Admissions Committee of relevant department. For non-relevant degrees, the candidate will be required to register for additional Masters level courses as pre-requisites as per the guidance provided by the Admissions Committee.

Degree Requirements

For completion of the PhD degree, the student must complete a total of 48 credit hours (18 credit hours course work and 30 credit hours dissertation) for Social Sciences, Educational Leadership and Management, Computing, Biosciences and Management Sciences. Following is the step by step procedure for PhD:

PhD Degree Milestones

- Clearing admission requirements of HEC and SZABIST
- Completing course work with required CGPA
- Passing Comprehensive Examination
- Clearing proposal defense
- Completing dissertation
- Completing publication requirements
- Clearing Pre-Defense Seminar
- Receiving Satisfactory reports from foreign evaluators
- Clearing Open Defense

Two interdisciplinary courses can be allowed with the approval of both relevant Program Managers subject to the relevancy of courses.

ADMISSION REQUIREMENTS

Comprehensive Examination

After completion of the required course work that includes 5 courses and one IRS, all PhD students must pass the PhD Comprehensive Examination within two years from the date of admission as per HEC requirement. Failure to pass comprehensive examination within two years from the date of admission will result in cancellation of admission. Maximum course load allowed in each semester is nine credit hours. A student must clear the Comprehensive Examination in maximum two attempts.

After successfully passing it, the candidate will get PhD candidacy and he/she will be assigned a research supervisor.

Research Proposal

The candidate shall prepare a research proposal under the guidance of research supervisor. At the start of dissertation, the student will work on Proposal for Dissertation comprising of six credit hours. These six credits of proposal will be split into 3 cr. hrs. each semester and these six credit hours of proposal will be included in 30 credit hours of dissertation. The PhD research proposal must be presented before the Evaluation Committee.

Dissertation

A student may register for 3, 6, 9 or 12 credit hours in regular semesters (Spring or Fall). However, for registration in 12 credit hours, approval from Program Manager is required. Registration in 12 credit hours can be done only once throughout research phase. No registration is allowed in Summer in general, as it is not a regular semester. The time frame for completing PhD Degree is minimum three years and maximum eight years.

Publication Requirements

All PhD candidates are required to write at least one research paper in the area of their research and submit it for publication in the required category of HEC recognized journal. The paper must be published before sending the dissertation to two foreign evaluators.

Pre-Defense Seminar(s)

Before sending the dissertation to two foreign evaluators belonging to technologically advanced countries in the relevant field, the candidate has to demonstrate his or her research work in front of a panel of experts. The candidate is required to incorporate the necessary changes as proposed by the panel of evaluators in the Pre-Defense Seminar.

Foreign Evaluation

The dissertation is sent for evaluation to two foreign evaluators in technologically advanced countries as per criteria prescribed by HEC. If the dissertation is sent again to the same evaluator after major revision, or if it is sent to a 3rd evaluator, the evaluation fee will be borne by the student along with all the additional charges.

Final Defense

After receiving minimum two satisfactory evaluation reports from the foreign evaluators, the candidate is required to appear for PhD open defense. A formal presentation of dissertation is required to be produced before Evaluation Committee in an open defense along with viva voce exam.

Admission Test Alternates

For Bachelors Programs

Applicants may submit a minimum 1100/1600* score of SAT 1.

The scoring of SAT 1 will be considered as follows;

SAT score	Test Marks
1500 – 1600	50
1400 – 1499	45
1300 – 1399	40
1200 – 1299	35
1100 – 1199	30

*Candidates securing 100% marks in SZABIST's admission test will be equivalent to 50.

For Masters Programs

50% score of GMAT for Master Programs.

For MS Programs

GAT (General)/GRE/HAT relevant with minimum 50% score.

For Phd Programs

GAT (Subject) or GRE Subject with minimum 60% score or SZABIST's own GAT Subject test with 70% score for Bio Sciences.

GAT General or relevant HAT is mandatory for MS with minimum 50% score. GAT/GRE Subject is mandatory for PhD with minimum 60 % score.

Transfer Policies

Transfer into SZABIST can only be accepted for candidates who have studied or are currently studying at HEC recognized universities. Transferring credits must have a minimum letter grade of B or above (or 80% marks). The request for transfers must be made at the time of admission.

ADMISSION REQUIREMENTS

Candidates will be required to clear all SZABIST admission requirements.

Bachelor Course Transfer

A maximum of up to 50% credits may be considered for transfer into BS/BE programs.

MoA & MPM Course Transfer

A maximum of up to 6 credits may be considered for transfer into the MPM, Master of Advertising programs.

MBA Course Transfer

- A maximum of up to 6 credits may be considered for transfer into the MBA 36 credit hours program. Research Project/Thesis is not transferable.
- A maximum of up to 36 credits may be considered for transfer into the MBA 72 credit hours program. Research Project/Thesis is not transferable.
- Only relevant courses of the EMBA (SZABIST) program are transferable into the regular MBA program subject to the eligibility criteria of the MBA program at SZABIST.

EMBA Course Transfer

No transfer courses are allowed into the EMBA program at SZABIST.

MS Course Transfer

Up to 50% of total course work completed at an HEC recognized university can be allowed for transfer at SZABIST MS program.

PhD Course Transfer

Transfer of courses up to 6 credit hours from an HEC recognized university may be allowed in special cases by making a petition to the Doctoral Committee before formal acceptance into the PhD Program. The student may be required to take additional courses as recommended by the relevant program manager.

SZABIST Inter-Campus Transfer

For inter-campus transfer, the candidate must fulfill the admission requirements of the given program at the local campus as per applicable transfer policy.
All courses/grades are transferable. A transfer fee will be payable by students transferring from any other SZABIST campus.

Certificate Course Transfer

For transfer candidates from the SZABIST Certificate Programs, transferability of certificate courses is as follows:

- Maximum 05 courses are transferable in under graduate program.
- 2/3 courses are transferable in Masters or MS program.
- Maximum 02 courses are transferable in PhD program.

The minimum letter grade of Certificate courses from SZABIST which are transferable to regular degree program: for PhD its B and above, for MS its B- and above, for all master's program its C+ and above and for bachelor's programs its C and above.

Financial Assistance

SZABIST offers financial assistance to eligible and deserving students in the form of various SZABIST funded and external donor funded scholarships as under:

- SZABIST Merit-Based Scholarship
- SZABIST Need-Based Scholarship
- General Subsidy
- Sindh Police Shaheed Scholarship
- SZABIST Employee Children Fee Concession
- SZABIST Employee Continuing Education Scholarship
- Sindh Education Endowment Fund Scholarship
- Baluchistan Education Endowment Fund Scholarship (Partial Funded / Fully Funded)
- USAID Funded Merit and Need-Based Scholarship
- HEC-Indigenous PhD 5000 Fellowship Program
- Mitsubishi Corporation Scholarship
- Orange Tree Foundation Scholarship
- Various community-based scholarships

SZABIST also offers loan facilities as under:

- Ihsan Trust's Qarz-e-Hasna Interest Free Loan Facility
- The Citizens Foundation Financial Assistance

LIFE AT SZABIST

FACILITIES

Video Conferencing

SZABIST is the first educational institute in Pakistan that introduced multi-point interactive Video Conferencing (VC) technology in 2001. SZABIST regularly uses VC technology in interactive learning sessions among Dubai, Islamabad, Larkana, Hyderabad and Karachi Campuses as well as in conducting seminars, lectures and presentations with foreign universities. Video Conferencing has been the most effective mode at SZABIST in bringing in live and interactive guest lecturers from national and international experts. Video Conferencing technology opens the door to exciting and valuable learning experiences. By allowing access to and interaction with resources that might have otherwise been too inconvenient or expensive, Video Conferencing ensures a highly enriched learning environment. By taking the lead in opening this field in educational practices, SZABIST also lead in creating the most advantageous nexus between cutting-edge technology and effective learning.

Conferences/Forums/Seminars/Guest Lectures

To increase awareness and understanding of information technology and business-related issues, many conferences, forums, seminars and guest lectures are organized regulary. These seminars and lectures are in continuation of the Institute's policy towards entrepreneurship development and networking. Seminars are conducted and attended by the leading figures from business and industry as these sessions address various business practices.

Professional Development Courses

The Institute also offers several productivity- based certificate courses as part of its continuing education program. The courses are developed jointly by the faculty, specialists and certified trainers in specific subject areas. The aim of these courses have been to initiate discussion and modeling of practical problems, business opportunities and to improve understanding of current issues in Information Technology, Business and Management. These courses include topics such as e-Commerce, New Programming Languages & Tools, Business & Entrepreneurship Management, Selling Skills, Conflict Resolution, Effective Leadership, and Productivity, Quality-Related Issues, Brand Management and Digital Marketing.

In addition to business productivity courses, the institute arranges study groups, mentor workshops and courses for students for removing deficiencies, if any. These courses include Business Communication, Technical Writing, Public Speaking, Personality Grooming, Interviewing Techniques and learning of Statistical Package for the Social Sciences (SPSS).

Classrooms/Labs/Libraries

Classroom sessions at SZABIST are quite different from other professional university setups. Teachers pay individual attention to the limited number of candidates selected purely on merit. Instructors encourage participation instead of a monologue. Students utilize various visual aids for presentations and are always on alert because of the regular unannounced quizzes, assignments and the mid-term exams. All classrooms are air-conditioned and are equipped with multimedia projectors, wall mounted screens and white boards. All classrooms are equipped with computers along with broadband intranet and internet connectivity with electricity backup through UPS.

SZABIST computer laboratories are regularly revamped with brand new labs space, furniture and latest machines with giga bite network connectivity to cater student's requirements. "Campus licensing" of latest software, including development tools, and operating systems provide an unmatchable environment compared to majority of well-reputed universities of Pakistan.

SZABIST has computing facilities supported with 24x7 broadband connectivity of 295 Mbps committed bandwidth to the internet and intranet. SZABIST is Wi-Fi enabled since 2002. Two new computer labs are added to the existing labs infrastructure. Students and guest are welcome with their BYOD and can access all network available resources wirelessly. SZABIST has also acquired Microsoft IT academy and Oracle Academic Alliance program.

SZABIST library holds a rich collection of books, Journals, Magazines, and a large number of digital libraries and online databases. SZABIST Library has six workstations through which students can access an unlimited number of journals and magazines. This facility is further extended to registered students through the SZABIST network on demand. SZABIST library provides comfortable physical spaces and furniture with a peaceful environment. Moreover, SZABIST has its own Research Centers, i.e., the Centre of Renewable Energy Research (CRER), and Sustainable Development Research Centre (SDRC) with their own specialized library for reference and general reading.

Moreover, SZABIST has its own Research Centers, i.e., the Centre of Renewable Energy Research (CRER), and the Sustainable Development Research Centre (SDRC) with its specialized library for reference and general reading.

LIFE AT SZABIST

SZABIST established Smart Lab equipped with tremendous high speed 7th generation laptops for students. These laptops are connected with SZABIST network through Wi-Fi.
A state of the art Smart screen is also available for teacher and students. They can interact with each other in more effective and robust way.

Research Committee (RC)

SZABIST places high emphasis on research & development and devotes conscious efforts to promote research culture among faculty and students alike. In this regard, a Research Committee (RC) is constituted to coordinate, record, and formalize diverse research activities across different departments and campuses to bring harmony and create an impact for national and international recognition of the university. Research publications produced by faculty and students are given a handsome remuneration depending on the level and merit of publications, vetted by RC. All sorts of participations in national and international conferences by the faculty & staff are approved by the RC. This may also propose a change in research policy for the university to BASR.

Doctoral Committee (DC)

The Doctoral Committee has a key function to monitor the progress of all MS and PhD students. The committee conducts its meetings regularly and discusses and recommends the individual cases of all such students pertaining to approval of their research work, selection of supervisors, co-supervisors, examiners, evaluators (national and foreign), provides approval for conduction of pre-defense seminars & open defense, and all other related activities. The DC also ensures the research work that carries its value to the society and is free from any un-ethical matters. In this regard, Institutional Ethical Review Board (IERB) work under the supervision of DC.

Board of Advanced Studies and Research (BASR)

SZABIST has also constituted a Board of Advanced Studies and Research (BASR) which holds its meetings twice a year to discuss and approve/disapprove, the recommendations sent by Doctoral and Research Committees. This is chaired by the President of SZABIST and co-chaired by the Vice President (Academics). The board further considers and reports to the authorities on the award of research degrees, proposes by-laws and policies regarding MS/PhD programs (across all campuses) and the initiation, execution, and award of research degrees; provides approvals on appointments of supervisors for postgraduate research students and approves titles and synopses for their theses or dissertations, as recommended by DC. The decisions taken in BASR are ratified in the Academic Council.

Academic Council

Academic Council is the highest academic statutory body of SZABIST. The Council is responsible for developing and maintaining a mechanism to offer quality education across all the campuses of SZABIST. The Council, in general, takes into consideration matters related to introduction of new program, changes in existing program structure, introduction of new courses, revision in course outlines, policy framework related to entry and exit of students and policy matters pertaining to research and development. The regular agenda items are forwarded by Board of Faculty (BoF) and Board of Advanced Studies and Research (BASR). The frequency of Academic Council's Meeting is twice a year and the meeting is chaired by the President and Co-chaired by Vice President Academics of SZABIST. The members include Deans, Registrar, HoCs, HoDs and external experts from academia and industry.

Office of Research Innovation and Commercialization (ORIC)

ORIC is an academic support department in Shaheed Zulfiqar Ali Bhutto Institute of Science & Technology (SZABIST) that provides comprehensive services for research innovation and commercialization. It serve as a bridge in between multiple faculties of SZABIST and produces quality research and innovative products for filing patents / trademarks / designs.

ORIC is the epicenter of all research and development activities within all campuses of SZABIST. It provide assistance to faculty members and research students in producing research article / projects, at national as well as international level and arranges periodic workshop / training /seminar / conferences.

ORIC shorten the gap between acquired knowledge and required knowledge within the organization. The complete working of ORIC evolve in coaching, counseling, recognition and feedback. The leadership of ORIC is concerned with integrity, impartiality, professionalism, partner focus, efficiency, and mutual respect.

Team ORIC is continuously engaged in providing strategic direction to all research and development initiatives produced within the territory of SZABIST, and in promoting joint research activities with other horizontal and vertical partner institutions.

LIFE AT SZABIST

ORIC strengthen the relationship with industry, government and non-government organizations for promoting entrepreneurship, technology transfer, and commercialization activities produced.

ORIC concentrate on sustainability and reliability of the research products and has a mandate to earn yearly revenue from licensing, royalties, policy advocacy and other related activities.

Moreover, ORIC also invest in capacity development of the faculty, staff and other researchers in the university. It periodically arranges exhibitions, showcasing events, industry linkages fairs, and seminars at one side while training, workshop, innovation, and commercialization seminars on other side.

WHY ORIC

In recent millennium, global knowledge economy has strengthened the need for strategic partnerships that go beyond their traditional roles as collaborators.

World-class research universities are at the forefront of pioneering such partnerships. They are intended to run longer, invest more, look beyond and sharpen the competitiveness of industries, universities and regions.

Keeping in view of these challenges, the Office of the Research, Innovation and Commercialization has been initiated at SZABIST, Karachi.

The mission of ORIC as outlined by HEC is "Transforming Pakistani universities to drive high impact innovation, applied research and entrepreneurship". The ORIC's vision is to enable and lead Pakistan's transformation to a knowledge-based economy dependent upon innovation and entrepreneurship.

The Office of Research Innovation and Commercialization is being established to link research and commercialization from SZABIST with emerging and existing firms across Pakistan and around the world.

As an umbrella, ORIC is meant to work closely with the researchers and on campus Incubators and S&T Park. The ORIC office also serves as a conduit to local, regional and federal partners to ensure research results aid the growth of Pakistan's economy.

ORIC is meant to work on commercialization of research and helping startups to incubate, grow, create new jobs, products, services, markets, carry out innovation and bring in funding. The following are the prime activities of ORIC at SZABIST:

- Managing applied research, innovation and commercialization activities within the universities through industrial collaboration;
- Intellectual Property Commercialization through documentation, evaluation, protection, marketing, licensing and royalties agreements;
- Partnership with national / foreign universities, government departments, and non- government organizations for reports, publication, contracts and consultancies;
- Participate in government programs and in securing funding for research from public and private sector;
- Organizing training, workshop, seminars, focus group discussions for maintaining academia - industry linkage as well as capacity development;
- Help final year students through startups and joint ventures.

ORIC IN 2022

ORIC SZABIST is continuously strengthening its relationship with the faculty and non-faculty members of SZABIST inwards, and with government & non-government organizations, industry and other higher educational institutions outwards.

Main purpose of this association is to develop a long term industry – academia relationship that would cadre the essential elements of the fourth wave of industrial revolution (Industry 4.0).

Industry 4.0 is the origin of a new revolution since it integrate virtual and physical system of manufacturing and improved productivity, efficiency and quality of the product. Big Data, artificial intelligence and digital conversion of industrial processes, are essential ingredients of this wave.

ORIC has compiled its Five Year Plan with special emphasis of industry (4.0). Sustainable Competitive advantage is the only objective of this proposal which can be achieved through training & development, coaching and guiding the future scientist and researchers. This plan has also defined "Input – Throughput – Output" strategy that creates enabling environment for linking academia with the industry.

ORIC SZABIST has completed its half journey for academic session 2021-22 and achieved the target of Research Excellence through: competitive grant management, coordination & networking, policy advocacy, case studies and civic engagement events. Similarly, ORIC is promoting Innovation & Commercialization activities through: IP legislation, IP linkages, networking & coordination, and commercialization activities.

ORIC has two ready to use publication i.e. Research Funding Window (RFW) and Country Profile - Research & Innovation

Indicators (CPRII). ORIC SZABIST has also submitted research projects on Higher Education Commission (HEC) supported grants National Research Program for Universities (NRPU), Local Challenge Fund (LCF), and Technology Transfer Support Fund (TTSF).

ORIC SZABIST has a functional website and about to publish a magazine named "ORIC Nama". ORIC has also started an exclusive lecture series with the caption "نیادور نیا کاروبار" "Naya Dour Naya Karobar". ORIC has completed the survey on Unpaid Care Workers in collaboration with Parliamentarian Commission for Human Rights (PCHR). ORIC has also conducted numerous interactive session with the title "ORIC Ambassador". Similarly, ORIC has developed its external as well as internal Data Bank for research. ORIC is also in the middle to conduct a showcasing event "FYP Conference". Finally ORIC has completed its homework to take part in Kamyab Jawan Program announced by government.

For further information about ORIC SZABIST please visit oric.szabist.edu.pk.

Data Centre

The Data Center has been designed with the Telecommunication Industry Association's (TIA-942) Tier-II international infrastructure standards including raised flooring, redundant HVAC precision units, fire detection, alarm & suppression system, precision UPS & power system, CCTV and access control system for remote monitoring. The Data Center is responsible for providing LAN & WAN connectivity, Web Services, Video Conferencing, hosting private cloud services and Server Farm (including Domain Controllers, Proxy, Email, Web, Network Management, Electronic Bulletin Board, ZABDESK ERP and many more) and other related services of all five campuses, ZABTECH and IMC.

Computing Resources

Computing resources of the data center is comprising of 20 TFLOPS of processing speed with high performance and reliable 100 Tera Bytes of storage capacity. The data center is equipped with UPS backup and 12-ton redundant precision cooling system for reliability of data center and protected by FM-200 based Automatic Fire Detection and Suppression System and manual fire extinguishers. CCTV cameras and Access Control systems are intact for effective surveillance and restricting unauthorized access to the facility.

Campus Network Infrastructure

Campus network is based on n-tier architecture which includes security, core, distribution and access layers. The backbone comprises three upper layers i.e. security, core and distribution as well as primary & backup fibre optic link connectivity for all buildings. In Data Center, redundant Chassis-based routers, core and distribution switches and firewalls with high transmission rate are commissioned, where device and link redundancy has been maintained at every level to ensure un-interrupted ICT services to users. Gigabit Access Network has also been commissioned to ensure high-speed computing at user end, where access switches of high switching capacity are installed to handle data and multimedia traffic, efficiently. Proper NMS server installed to monitor and manage the whole network infrastructure, which can send alert on any fault, performance bottleneck and/or security issues.

Wireless Mesh Network

A secured Wi-Fi mesh network has been implemented throughout the campus. Wireless indoor and outdoor Access Points (APs) have been installed to give internet/intranet access to students, faculty and staff employs latest wireless protocol 802.11n with each AP providing a bandwidth up to 300 Mbps to the users.

Newsletters

SZABIST publishes Newsletter on regular intervals from all its campuses to update about the activities taking place at the campuses.

ZABFM DIGITAL

(www.zabfm.org)

ZABFM digital is a streaming simulcast radio station exclusively to impart and disseminate education for the students around the world via www.zabfm.org and ZABFM DIGITAL (YOUTUBE). An initiative taken by Shaheed Zulifkar Ali Bhutto Institute of Science & Technology and it was a substantive step into the field of education. It is an honor for the nation as we are producing the talented and most efficient candidates in the form of great speakers to the nation along with the responsibility of spreading knowledge through the airwaves. The 24/7 programming schedule covers various subjects of life like, Career Counseling, Planning & Development, Education, Infotainment, Awareness, Research, Documentaries, Talk Shows, Sports, Travel, Science & Technology, Media, Culture & Society, Technology & Inventions, Info-tech and social order, etc.

Student Support Services

For more than a decade (2009-to date), the main campus of SZABIST has been fortunate to have a unique and diverse student body with a healthy record of activities and a proud history of achievements. Since 2014, with the establishment of the Department of Student Support Services a more

organized and focused approach has been adopted with the aid of student advisory policies and guidelines for activities in the form of standard operating procedures and financial prudence guidelines with emphasis on paperwork and documentation/reports for record keeping all of which added much needed structure to student activities at the institute. The Student Advisory Office and the Executive Development Centre (EDC) work under the SSS.

In 2015, the same system was gradually introduced at other campuses of SZABIST and by now they have all had annually elected student council bodies.

The Student Support Services aim to provide students with a platform that allows them to conduct activities which work towards the development of a stronger, wiser and a more united student populace in Karachi. It works to inculcate in young minds the values of unity, tolerance, inclusion and leadership and through engagement with other campuses of SZABIST and universities across the country realize the objectives of our core areas of focus, nationally as well.

The Student Support Services has an Office of Student Advisory and the Executive Development Centre working under it.

The Office of Student Advisory
The Office of Student Advisory/Affairs provides guidance on all extra-curricular activities that take place on campus. The Student Affairs Advisor:

- Manages and supervises overall activities of Student Societies and SZABIST Student Council (SSC) at SZABIST, Karachi. Acts as a liaison between the SSC and the management of SZABIST.
- Ensures that SSC and its societies' activities are held in compliance with the SSC constitution, financial and administrative procedures and SZABIST management guidelines.
- Arranges student activities within and outside campus through Activities Coordinators and staff of the Department of Student Support Services.
- Counsels students regarding their behaviour and general guidance and helps them to understand their potential and ways to pursue their goals.
- Certain cases may be referred to Head of Student Support Services or Vice President (Academics)

SZABIST Student Council (SSC)

Established in 2009, the SSC has been a union of hardworking, ambitious and talented individuals across all programs of SZABIST elected under the Election Commission of SZABIST. The selection of SSC workforce is by means of rigorous process all on an annual basis to form the student government at the institute, under the supervision of the Student Affairs Advisor.

Furthermore, it acts as a parent body to its chapters in other campuses of SZABIST namely, SSC-Hyderabad Chapter, SSC-Islamabad Chapter SSC- Larkana Chapter, SSC-Dubai Chapter and SSC-Gharo Chapter.

What does SZABIST Student Council (SSC) do?
The SSC has been engaged in initiating wide range of meaningful activities ranging from intellectual programs to competitive sporting events. Among the most notable is the annual LEAD Convention, where SSC provides a platform to the young leaders, from all universities across the city, to contemplate over the global issues that require sustainable yet immediate solutions. Moreover, SSC, being a proactive student body, has signed MoUs with different organizations and NGOs to contribute in various noble causes. Urban Forest and The ELF (Environmental Leaders Forum) are two such MoUs where the SSC is practically engaged in environmental protection and conservation through trainings, awareness programs, fundraisers, students' projects and other healthy activities. Further, SSC has also extended help to the countrymen whenever there is a need in times of national crisis like the flood disaster in the year 2022. To offer a vibrant and healthy students environment at SZABIST, the SSC also arranges the Annual Orientation to welcome the new students, beach party, musical concert, Mehfil-e-Mushaira, Qawwali night, Graduation Week and many more entertaining events.

Structure of SSC
The SSC is an elected student body that is comprised of the Executive Branch (EB), Council of Common Interests (or Program Representatives), General Body and Societies Committee.
The Executive Branch of the SSC consists of elected members to serve as President, Vice President, General Secretary, Treasurer, Secretary Legal, Secretary Operations, Secretary Resource Mobilization, Secretary Media and Communication and Secretary Projects and Training.
The Five Pillars of SSC
The SSC and all its student associations and clubs fall under the purview of and are registered with, the Office of Student Advisory once they are formed. The SSC has 5 thematic pillars, under which different students' societies and projects operate. Each society offers engaging events and programs

LIFE AT SZABIST

for the students at SZABIST. The annual events include ZAB Olympics and ZAB Premier League from the Sports Society, ZAB Theater and MAD Fest from the Performing Arts Society and ZAB DC (Declamation Contest) from the Oratory Society. The projects like 'Umeed' teaches literacy and basic education to lower staff at SZABIST, 'Nijaat' focuses on women empowerment and mental health and EPC (Environmental Protection and Conservation) creates awareness about environmental sustainability and engage students in environmentally friendly practices.

The 5 pillars and respective societies are mentioned below:

LEADERSHIP
- SZABIST Oratory Society
- ZABMUN
- SZABIST Law Society

SPORTS
- SZABIST Sports Society

PROFESSIONAL & TECHNICAL
- ASME
- ACM
- SZABIST Bio-Sciences Society
- SZABIST-Entrepreneurial Society

COMMUNITY SERVICE & CIVIC ENGAGEMENT
- Rotaract Club of SZABIST Karachi
- Karachi SZABIST Campus Lion's Club
- SZABIST Social Sciences Society

ARTS & CULTURE
- SZABIST Performing Arts Society
- SZABIST Literary Society
- SZABIST Cultural Society

Referral to the Counselor

A student of SZABIST may be referred to the Counselor by Faculty/Staff through the concerned Program Manager, PM/HoD/Dean, Student Disciplinary Committee (SDC) or Anti- Harassment Committee (AHC) with information to Head of Student Support Services (HoSSS) and Student Affairs Advisor (SAA).

Any student of SZABIST may directly approach the Counselor by email at counselor@szabist.edu.pk

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Executive Development Center (EDC)

The Executive Development Center (EDC) at SZABIST Karachi facilitates students in completing their degree requirements, professional development, and job/internship placements.

Throughout academic tenure, the students are encouraged to attend customized trainings, personal development programs, webinars, Zabtalk sessions and presentations by industry experts who share their experiences to help them understand the transition from campus to the corporate world.

EDC compiles students' profiles and publishes the annual graduate directory in order to provide SZABIST graduates to credible organizations.

EDC engages with the Alumni for relationship building, corporate networking and profile update. A body with a name SZABIST Alumni Global Association (SAGA) is there to build strong bond with alumni. The vision of SAGA is "To empower the SZABIST Alumni for exploring new avenues and expanding knowledge for continuing their journey of self-discovery".

Job & Internship Placements

In collaboration with the industry, EDC arranges job/internship recruitment drives and management trainee programs by reputable national and multinational companies. EDC facilitates students for internships and job openings in the corporate sector throughout the year.

An annual "Career Fair" is held in the beginning of every year at the campus in which leading companies are invited to discuss their recruitment policies and procedures, their current resource requirements and future vacancies. The students receive an opportunity to interact with company representatives directly.

To bridge the gap between classroom and market, SZABIST has instituted a mandatory internship program. Apart from enabling students to get the feel of an office environment, internships expose them to potential employers for possible recruitment.

Eligibility for Internship

- Masters Degree students with at least two semesters completed at SZABIST.
- Bachelors degree students with at least six semesters completed at SZABIST.
- Minimum duration of internship is six weeks.
- Preference is given to those students who are about to graduate and need an internship as a pre-requisite for their degree completion.

ZABSolutions

SZABIST has its own software house that fulfills the software needs of the SZABIST. The state-of-the-art applications that ZABSolutions has developed and evolved are successfully supporting and fueling the complete academic process of the SZABIST. The complete academic process flow of students from filling the online admission form to the printing of transcript and degree runs on ZAB LMS (ZAB Learning Management System).

Several educational institutions in Pakistan have shown their interest in ZAB LMS. The academic process of several institutions in Pakistan will soon be migrated onto our ZABLMS.

The ZABSolutions incubator help students foster their software skills. Students can access ZABSolutions' resources and knowledge to develop their skills and competencies, which are important to compete in the market. Following are the objectives of the incubator:

1. Provide a practical framework for knowledge and technology transfer to the students
2. Develop the confidence and competencies for building e-firms
3. Involve students in software research and development
4. Enhance partnership between industry and academia
5. Provide faculty and the students with innovative support facilities

LIFE AT SZABIST

National and International Linkages and Collaborations

SZABIST is a registered member of the following international and national associations:

1. International Association of Universities (IAU), Paris
2. Association of Commonwealth Universities (ACU), London
3. The Association to Advance Collegiate School of Business (AACSB), Singapore
4. Asia-Pacific Quality Network (APQN), People's Republic of China
5. The Talloires Network, USA
6. The Chartered Institute of Logistics and Transport (CILT), UK
7. Management Association of Pakistan (MAP), Karachi
8. Marketing Association of Pakistan (MAP), Karachi
9. Human Resource Development Network (HRDN), Islamabad

Moreover, SZABIST has signed MoUs, articulation and collaboration agreements with the following national and international universities and institutions:

1. Association of Chartered Certified Accountants ACCA, UK

The MoU will provide exemption from ACCA papers to Bachelors of Business Administration and BS Accounting & Finance courses.

2. Balochistan Education Endowment Fund Scholarship, Pakistan

Under this MoU Government of Balochistan will be proving fully funded scholarship to 5-6 meritorious and financially challenged students of SZABIST who are local domicile certificate holders of Balochistan. The scholarship will be for the complete duration of the degree program.

3. CISCO Networking Academy

SZABIST Karachi Campus is an authorized CISCO Network Academy to conduct IT-essentials, CCNA routing & switching, and CCNA security certifications.

4. Coventry University, UK

Through this MoU, SZABIST students enrolled in Bachelors of Arts in Business Studies (BABS) will be conferred Coventry University degree on completing two years of education at SZABIST and one year at Coventry University, UK.

5. Dr. Esssa Laboratory and Diagnostic Centre

SZABIST employees will avail varying discounts on health related tests, the parties will work together on research in the field of Bioscience technology. Dr. Essa Laboratory will also provide opportunities of jobs and internships to SZABIST graduates.

6. Greenstar Social Marketing Limited (GSM), Pakistan

Through this MoU SZABIST and GSM will work on the field of research pertaining to Family planning and child health.

7. Ihsan Trust, Meezan Bank Pakistan

The MoU with Ihsan Trust is aimed at provision of Qarz-e-Hasna (Interest-free Loan) facility up to 100 % of tuition fee to SZABIST students.

8. Integration Xperts (Private) Limited, Pakistan

Integration Xperts (Private) Limited and SZABIST will do Joint Research and Development on Bio-Sciences Health Tech Solutions such as Mobile Diagnostics, Diabetes Management and Remote Health Monitoring of Infants and Old Age people.

9. International Center for Chemical and Biological Sciences, University of Karachi, Pakistan

This MoU provides a framework for mutually beneficial cooperation between the two parties through different activities and research projects.

10. International Committee of the Red Cross (ICRC), UK

Through this MoU SZABIST Law Department will work with ICRC to promote and implement legal changes for protection of health care against violence. Both parties to collaborate for improved protection of health care workers, patients, facilities and transport through mobilization of a broad Community of Concern and advocacy.

11. Mitsubishi Corporation, Japan

Mitsubishi Corporation through this MoU would be awarding 100% scholarship three students enrolled in the Media Science BSMS program.

12. NOWPDP

NOWPDP a Disability Inclusion Initiative and SZABIST Karachi-BBA have joined hands for supporting initiatives for persons with disabilities in the province of Sindh. Both the parties will facilitate access to opportunities and services for persons with disabilities.

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13. OPEN Organization of Pakistani Entrepreneurs of North America

SZABIST and OPEN Karachi Chapter will jointly establish student chapter to promote entrepreneurship and innovation among Pakistani youth by providing trainings, conducting workshops and seminars.

14. Orange Tree Foundation OTF, Pakistan

SZABIST collaborated with Orange Tree Foundation for providing scholarships for the students of SZABIST. This MoU ensures equitable opportunities of education for all the needy yet bright students. To bring them at par of mainstreaming through creating a critical mass of talented youth for the development of society.

15. Sindh Police Shaheed Scholarship

The MoU will enable children of Shaheed Police Officers of Sindh to study at SZABIST on scholarship. The MoU will be applicable to the Police employees who embraced SHAHADAT while performing their duty within the jurisdiction of the Sindh province.

16. Tabba Kidney Institute

SZABIST and Tabba Kidney Institute will participate in collaborative research and in capacity building activities. And both will conduct academic research to get further insights into the areas of Urology. Students of Bachelor of Science in Public Health (BSPH) will get the opportunity of certificate-based volunteer work in TKI. To foster increased interaction among TKI research staff, SZABIST faculty and advanced / graduate students engaged in scientific and scholarly research in areas of mutual interest.

17. The Citizen Foundation, TCF Pakistan

As part of social responsibility, SZABIST and TCF have collaborated to facilitate TCF students with admission fee waiver, and scholarship opportunities to study in any of SZABIST degree programs.

18. The Chartered Institute of Logistics and Transport (CILT), UK

SZABIST has signed a MoA with CILT for introducing certification in logistics and transport. To attain this certification, a total of three mandatory courses will have to be completed.

19. University of London, UK

SZABIST is a registered center of University of London for giving tuitions for its LLB program.

20. CIMA

SZABIST BSAF, BBA, BABS, BSENT, EMBA, and MBA (non-finance electives) students and alumni will be exempt from all 13 courses and will only attempt three case studies. MBA students with finance electives and BS (Accounting & Finance) alumni will be exempt from all 13 courses and operational-level case studies and will only attempt two case studies.

21. Gaditek

SZABIST and Gaditek collaborate in strengthening the undergraduate degree programs of Management Sciences, Computer Science and Media Science by providing real life, research and development, industrial, capstone and final year projects to SZABIST students.

22. National Clearing Company of Pakistan Limited (NCCPL)

SZABIST and NCCPL commit to organize awareness sessions, recruit talented students and explore possibilities in relation to the development of Capital Market through Investor Education, Curriculum Development, and Jointly Holding of Conference/ Seminar on Capital Markets.

23. Pathfinder

SZABIST and Pathfinder aim to collaborate, develop and launch innovation startups, learning hubs on ideas such as Reproductive health, Family Planning, Climate change and it's Impact on women. Students of Life Sciences and Social Sciences will be working to provide solutions for the above stated issues.

24. Health Services Academy

The potential areas of collaboration between both parties are; Internships and practicum for the MSPH students, Joint/Mutual Research programs, collaboration for funded Projects, Conferences, Seminars, Certificate and diploma programs, On-the-job research training programs, and Faculty development program.

25. Afzaal Memorial Thalassemia Foundation (AMTF)

SZABIST BABS Program will help the AMTF to conduct Blood Drives annually, for which all the resources will be arranged by AMTF. The Blood collected through Blood Drive will be used for the treatment of Thalassemia Patients.

FACULTY OF MANAGEMENT SCIENCES

VISION

SZABIST Faculty of Management Sciences aspires to become one of the leading entities for excellence in business education, service, research and innovation.

MISSION

SZABIST Faculty of Management Sciences is committed to:

- Produce highly qualified business professionals to meet dynamic and challenging contemporary needs;
- Generate knowledge and expertise for business and economic solutions through research;
- Create an enabling environment for corporate and entrepreneurial outlook;
- Serve the community through student, faculty, and alumni collaboration.

FACULTY OF MANAGEMENT SCIENCES

BBA

SZABIST offers a four-year (eight semesters) BBA degree program of 144 credit hours. For the BBA program, students are required to complete 46 courses and a 03 credit hours Business Project & 03 credit hours Community Service Project. The courses include 42 compulsory courses and 4 Program Electives from Management, Marketing, Finance, Business Analytics, IT or Supply Chain Management. To obtain the BBA degree, students have to complete 144 credit hours and an internship. The degree needs to be completed within six years. BBA program is an ACCA accredited program; those who complete BBA from SZABIST, Karachi, will get an exemption in 06 out of 09 ACCA Foundation papers (F1, F2, F3, F5, F7 and F9). BBA Program is also accredited by National Business Education Accreditation Council (NBEAC), and affiliated with Chartered Financial Analyst (CFA) Institute.

First Year

Fall Semester

BA 1108	IT in Business
BA 1109	Personal Management and Communication
BA 1203	Management Principles
BA 1206	Oral Communication and Presentation Skills
BA 1119	Islamic Studies / Humanities
BA 2307	Sociology

Spring Semester

BA 1101	Introduction to Accounting
BA 1102	Microeconomics
BA 1105	English Writing Skills
BA 1204	Maths for Business
BA 1213	Pakistan Studies
BA 2312	Human Behavior

Second Year

Fall Semester

BA 1201	Financial Accounting
BA 1211	Logic and Critical Thinking
BA 3504	Organizational Behavior
BA 2303	Marketing Principles
BA 1202	Macroeconomics
BA 2406	Business and Electronic Communication

Spring Semester

BA 2311	Business Statistics
BA 2411	Cost and Management Accounting
BA 2301	Introduction to Business Finance
BA 2402	Retail Management
BA 2403	Business Ethics
BA 3507	Consumer Behavior

Third Year

Fall Semester

BA 3501	Financial Markets and Institutions
BA 3508	Media Management
BA 3605	Statistical Inference
BA 4706	Development Economics
BA 4801	Law and Taxation
BA xxxx	University Elective -I (as offered by Campus)

Spring Semester

BA 3601	Financial Management
BA 3602	Marketing Management
BA 3603	Business Research Methods
BA 3607	Operations Management
BA 4804	Human Resource Management
BA xxxx	University Elective-II (as offered by Campus)

Fourth Year

Fall Semester

BA 3502	Entrepreneurship
BA 4814	Project Management
BA 4705	Services Marketing
BA 4710	Business Project
BA 4xxx	Program Electives-I
BA 4xxx	Program Electives-II

Spring Semester

BA 3505	Quantitative Skills
BA 3609	Pakistan Economy
BA 4704	Management Information Systems
BA 4810	Community Service Project
BA 4xxx	Program Electives-III
BA 4xxx	Program Electives -IV

FACULTY OF MANAGEMENT SCIENCES

UNIVERSITY ELECTIVE
(To be offered by the campus as Compulsory courses)

BA 3506 Foreign Languages
BA 3519 Current Affairs
BA 3613 World Economy
BA 3614 Business Analysis and Forecasting*
BA 3619 Enterprise Management
BA 4701 Islamic Banking and Finance*
BA 4707 Marketing Research*
BA 3515 Graphic Design for Multimedia*
BA 3621 Professional Development
BA 3521 Auditing
BA 3522 Social Advocacy and Community Service
BA 3622 E-Commerce
BA xxxx Software Tools for Business*

Program Electives

Finance
BA 4115 Derivatives
BA 4214 Micro Finance
BA 4218 Financial Research
BA 4735 Islamic Banking and Finance*
BA 4719 Investment Banking
BA 4724 Financial Modeling
BA 4727 Dynamics of Banking
BA 4734 International Banking
BA 4752 Financial Reporting and Analysis
BA 4756 Econometrics
BA 4831 Portfolio and Investment Management
BA 4833 Security Analysis
BA 4834 Treasury and Funds Management
BA 4855 Financial Risk Analysis
BA 4867 Business Analysis and Forecasting*
BA xxxx Fintech

Marketing
BA 4116 Supply Chain Management
BA 4125 Emerging Media
BA 4126 Trade Marketing
BA 4217 Experiential Marketing
BA 4836 Marketing Research*
BA 4721 Advertising
BA 4722 Brand Management
BA 4739 Export Marketing
BA 4815 Event Management
BA 4816 Industrial Marketing
BA 4821 Media Planning
BA 4824 Sales Management
BA 4842 Graphic Design for Multimedia*
BA 4859 Product Innovation and Design
BA 4866 Integrated Marketing Communications
BA 4762 Digital Marketing
BA 4868 Marketing Analytics

Supply Chain Management
BA 4116 Supply Chain Management
BA 4126 Trade Marketing
BA 4211 Production Management
BA 4768 Total Quality Management
BA 4739 Export Marketing
BA 4742 Customer Relationship Management
BA 4764 Dynamics of Logistics and Distribution
BA 4824 Sales Management
BA 4844 Operations Research
BA 4859 Product Innovation and Design
BA 4766 Purchase Management

Management
BA 4116 Supply Chain Management
BA 4117 Salary and Compensation
BA 4711 Change Management
BA 4712 Industrial Relations and Labor Laws
BA 4713 Leadership and Motivation Techniques
BA 4812 Recruitment and Selection
BA 4813 Training and Development
BA 4815 Event Management
BA 4826 Talent Management
BA 4837 Performance Appraisal
BA 4844 Operations Research

Information Technology
BA 4224 e-Marketing Strategies
BA 4714 e-Business and e-Commerce Management
BA 4745 Information System Audit
BA 4822 Media Production
BA 4842 Graphic Design for Multimedia*
BA 4844 Operations Research

Business Analytics
BA xxxx Programming for Business
BA xxxx Business Intelligence Tools and Techniques
BA xxxx Consumer Insights and Analytics
BA xxxx Block Chain for Business
BA xxxx Digital Assets
BA xxxx Social Media Analytics
BA xxxx Software Tools for Business*

*University Elective can be taken as an Elective if not offered by the Campus as a compulsory course.

FACULTY OF MANAGEMENT SCIENCES

All courses may not necessarily be offered every year. Alternate courses may be substituted as and when required. Full-time academic load is six courses (18 credit hours). All students are required to register for full load in the first semester.

Internship
The internship is scheduled for summer at the end of third year. After completion of the 6-week internship, all students are required to submit a comprehensive report giving details of their experience and learning.

BS Accounting & Finance

BS (A&F) is a four years (eight semesters) program and consists of 144 credit hours of teaching. Students are required to complete 46 courses and a 6 credit hours of final year project (to be offered over last two semester) along with six weeks of internship to graduate. The maximum duration to complete this degree program is six years. Graduates of BS (A & F) will get exemptions in nine papers of both Institute of Chartered Accountants of Pakistan (ICAP) and Association of Chartered Certified Accountants (ACCA), UK.

SZABIST also offers 2.5-year Bachelor of Science (Accounting & Finance) program exclusively for CAF qualified students of the Institute of Chartered Accountants of Pakistan (ICAP). CAF qualified students are exempted 60 credit hours (20 course) of course work and have to complete 78 credit hours (26 courses) of course work and a 6 credit hours Research Project (to be offered over last two semester).

First Year

Fall Semester

AF 1101	Business Mathematics*
AF 1102	Computer Concepts and Applications*
AF 1104	Introduction to Financial Accounting*
AF 1105	Pakistan Studies
AF 1203	Communication Skills
AF 1205	Islamic Studies/Humanities

Spring Semester

AF 1103	English Comprehension*
AF xxxx	Business Management*
AF 1201	Advanced Financial Accounting*
AF 2303	Introduction to Psychology
AF 2304	Introduction to Sociology
AF 2405	Principles of Microeconomics*

Second Year

Fall Semester

AF 1202	Calculus for Business Studies
AF xxxx	Essentials of Marketing
AF 2302	Cost Accounting*
AF 2305	Organizational Behavior*
AF 3505	Principles of Macroeconomics*
AF 4703	Introduction to Business Finance*

Spring Semester

AF 2301	Business and Technical English Writing*
AF 2401	Management Accounting
AF 3501	Accounting and Financial Information Systems
AF 4827	Business Analysis & Forecasting
AF 2404	Money and Banking
AF 2406	Statistics and Probability*

Third Year

Fall Semester

AF 3607	Corporate Accounting*
AF 3511	Auditing -I*
AF 3506	Statistical Inference
AF 3507	Financial Institutes and Markets
AF 3606	Taxation*
AF 3608	Islamic Banking and Finance

Spring Semester

AF 3611	Auditing-II*
AF xxxx	Business Ethics
AF 3605	Financial Reporting*
AF 4701	Business and Labor Law*
AF 4702	Financial Management
AF 3609	Business Research Methodologies

Fourth Year

Fall Semester

AF 4xxx	Accounting Elective-I
AF 4707	Company Law*
AF 4801	Corporate Finance
AF 4xxx	Finance Elective-I

FACULTY OF MANAGEMENT SCIENCES

AF 4709 Final Project-I
AF 4xxx Ecommerce & Management Information System

Spring Semester
AF 1204 Introduction to HRM
AF 2306 Pakistan Economic Policy
AF 3504 Entrepreneurship and Small Business Management
AF 4xxx Accounting Elective-II
AF 4xxx Final Project-II
AF 4xxx Finance Elective-II

*Exempt courses for CAF qualified students of Institute of Chartered Accountants of Pakistan (ICAP)
All courses may not necessarily be offered every year. Alternate courses may be substituted as and when needed. Fulltime academic load is 18 credit hours. All students are required to register for full load in first semester.

PROGRAM ELECTIVES

Accounting
AF 4722 Advanced Performance Management
AF 4721 Advanced Audit and Assurance
AF 4822 Strategic Business Reporting
AF 4723 Forensic Accounting
AF 4821 Public Sector Accounting
AF XXXX Forensic Analytics
AF XXXX Tax Crime and Fraud Investigation

Finance
AF 4725 Analysis of Investment and Management of Portfolios
AF 4825 International Finance
AF 4824 Financing of SME
AF 4823 Financial Risk Analysis
AF 4826 Quantitative Data Analysis
AF 4724 Advanced Financial Management
AF 4727 Dynamics of Banking
AF 4728 Financial Modeling
AF 4726 Behavioral Finance
AF 4827 Business Analysis and Forecasting
AF xxxx Fintech
AF xxxx Financial Data Analytics
AF xxxx Financial Econometrics
AF xxxx Alternative Investments
AF xxxx Financial Derivatives
AF xxxx Investment Banking
AF xxxx Treasury and Fund Management
AF xxxx Fraud and Risk Management in Financial Institutions

Courses are subject to change.

Internship
The internship is scheduled for summer at the end of third year. After completion of the 6 week internship, all students are required to submit a comprehensive report, giving details of their experience and learning.

BABS

SZABIST offers a 3 year BA (Hons) degree in Business Studies from the Coventry University, UK. Students who complete two years at SZABIST will proceed ahead to complete the third year from Coventry University, UK and earn an International degree.

Students can also complete the BABS degree at SZABIST by opting for the 3rd and 4th year of BABS program. BABS is a General Management Degree. The maximum duration to complete this degree is six years.

First Year

Fall Semester
BA 1101 Introduction to Accounting
BA 1102 Microeconomics
BA 1103 Introduction to Computers
BA 1104 Personal Management
BA 1206 Oral Communication and Presentation Skills
BA 1204 Maths for Business

Spring Semester
BA 1201 Financial Accounting
BA 1202 Macroeconomics
BA 1203 Management Principles
BA 1105 English Writing Skills
BA 2305 Statistics and Mathematics for Business
BA 2312 Human Behavior

FACULTY OF MANAGEMENT SCIENCES

Summer Semester

BA 2301 Introduction to Business Finance
BA 2302 Graphic Design in Multimedia Presentations

Second Year

Fall Semester

BA 2303 Marketing Principles
BA 2304 Managerial Accounting
BA 2315 Introduction to Social Sciences
BA 2403 Business Ethics
BA 3504 Organizational Behavior
BA 1207 Introduction to Logic

Spring Semester

BA 3505 Quantitative Skills
BA 3601 Financial Management
BA 3602 Marketing Management
BA 4704 Management Information Systems
BA 4721 Advertising
BA 4801 Law and Taxation

Third Year

Fall Semester

BA 1113 Islamic Studies
BA 4804 Human Resource Management
BA 2406 Business and Electronic Communication
BA 3517 Entrepreneurship and Small Business Management
BA 3518 Law for Managers
BA 3605 Statistical Inference

Spring Semester

BA 3519 Current Affairs
BA 1213 Pakistan Studies
BA 3616 Customer Relationship Management
BA 3618 Leadership Development
BA xxxx University Elective I

Fourth Year

Fall Semester

BA 3507 Consumer Behavior
BA 3501 Financial Markets and Institutions
BA 4824 Sales Management
BA 3603 Business Research Methods
BA 4703 Staffing/Compensation and Employee Development

Spring Semester

BA 4807 Research Project
BA 4xxx University Elective II
BA 4814 Project Management
BA 4128 Operations and Supply Chain Management
BA 4827 Professional Development

UNIVERSITY ELECTIVES

BA 4127 Managing Across Global Environment
BA 3617 Introduction to International Business
BA 3506 Foreign Languages
BA 4815 Event Management
BA 4768 Total Quality Management
BA 3613 World Economy

All courses may not necessarily be offered every year. Alternate courses may be substituted as and when required. Full-time academic load is six courses (18 credit hours). All students are required to register for full load in the first semester.

Internship

The internship is scheduled for summer at the end of third year. After completion of the 6-week internship, all students are required to submit a comprehensive report giving details of their experience and learning.

FACULTY OF MANAGEMENT SCIENCES

BS Entrepreneurship

SSZABIST offers a four-year (eight semesters) BS Entrepreneurship degree program of 144 credit hours. For the BS Entrepreneurship program, the students are required to complete 45 courses and 9 credit hours of Capstone Project. The courses include 41 compulsory courses and 4 program electives. To complete the BS Entrepreneurship degree, students have to complete 144 credit hours with a mandatory requirement of 2 apprenticeships. The maximum time limit to complete the BS Entrepreneurship degree is six years.

First Year

Fall Semester

EN 1103 Introduction to Accounting
EN 1107 Pakistan Studies
EN 1102 Computer Applications in Business
EN 1206 Personal Management
EN 1101 Business Mathematics and Calculus
EN 1106 Oral and Written Communication

Spring Semester

EN 1207 Islamic Studies /Humanities
EN 1209 Introduction to Social Science
EN 1208 Business Management and Ethics
EN 1201 Accounting for Business Operations
EN 2304 Managerial Statistics
EN 2404 Introduction to Entrepreneurship

Second Year

Fall Semester

EN 2308 Introduction to Entrepreneurial Behavior
EN 1202 Business and Electronic Communication
EN 2305 Marketing Principles
EN 1205 Microeconomics
EN 4803 SME Management
EN 2307 Entrepreneurial Organization Planning

Spring Semester

EN 3601 Analysis of Pakistani Industries
EN 2403 Consumer Behavior
EN 2407 Legal Framework for Entrepreneurs
EN 2303 Macroeconomics
EN 4802 Innovative Business Models
EN 3505 Marketing Research

Third Year

Fall Semester

EN 3502 Business Plan Development
EN 3507 Business Data Analysis
EN 3503 Entrepreneurial Marketing
EN 3504 Finance and Taxation for Entrepreneurs
EN 3605 Product Innovation and Design
EN 4703 Emerging Media

Spring Semester

EN 3609 Capstone Project-I
EN 3603 Launching a Venture
EN 3604 Logistic and Supply Chain Management
EN 4701 Issues in Pakistan's Economy
EN 3608 Social Entrepreneurship
EN 3607 Business Development

Fourth Year

Fall Semester

EN 4709 Capstone Project-II
EN 4702 Financing a Venture
EN 4707 Services Marketing
EN 4708 Technopreneurship
EN 4xxx Program Elective-I
EN 4xxx Program Elective-II

Spring Semester

EN 4809 Capstone Project-III
EN 3506 Sustainability and Technology
EN 4805 Leadership Entrepreneurship
EN 4804 Digital Entrepreneurship
EN 4xxx Program Elective-III
EN 4xxx Program Elective-IV

Program Electives

EN 4826 Mergers and Acquisition
EN 4828 Trade and Retail Management
EN 4724 Export Marketing
EN 4824 Intrapreneurship
EN 4721 Agribusiness Management
EN 4725 Family Business Management
EN 4729 Women Entrepreneurship and Leadership
EN 4822 Crisis Management
EN 4726 Managing and Growing a Business
EN 4723 Creativity and Business
EN 4821 Applied Game Theory
EN 4823 Executive Leadership

All courses may not necessarily be offered every year. Alternate courses may be substituted as and when required. Full-time academic load is six courses (18 credit hours). All students are required to register for full load in the first semester.

Apprenticeship

It is mandatory for students to do a two 6-week apprenticeship with two different entrepreneurs. Students will be shadowing mentors to get an inside view at various operations inside the businesses that will supplement their learning.

FACULTY OF MANAGEMENT SCIENCES

Executive Master of Business Administration (EMBA)

The EMBA is a 2-year program spread over four semesters and consists of 66 credit hours of teaching. Twenty courses (60 credit hours), one Business Project (3 credits) and one Research Project (3 credits) are needed to graduate. The maximum time limit to complete the EMBA degree is 4 years.

First Year

Fall Semester

BE 5101 Accounting for Business
BE 5102 Business Management
BE 5103 Contemporary Marketing
BE 5104 Managerial Communication
BE 5105 Quantitative Analysis for Decision Making

Spring Semester

BE 5201 Applied Research Methods
BE 5202 Business Finance
BE 5203 Managerial Accounting and Control
BE 5204 Managerial Economics
BE 5205 Marketing Management
BE 5206 Organizational Behavior

Second Year

Fall Semester

BE 5301 Financial Management
BE 5302 Human Resource Management
BE 5303 Operations and Supply Chain Management
BE 5309 Business Project
BE 5xxx Elective-I (Marketing, HR, Finance and Supply Chain)

Spring Semester

BE 5401 Entrepreneurship and Family Businesses
BE 5402 Ethics and Corporate Governance
BE 5403 Strategic Management
BE 5409 Research Project
BE 5xxx Elective-II (Marketing, HR, Finance and Supply Chain)
BE 5xxx Elective-III (Marketing, HR, Finance and Supply Chain)

ELECTIVES

Marketing

BE 5321 Services Marketing
BE 5334 Retail Management
BE 5333 Media Planning and Management
BE 5322 Advertising
BE 5323 Brand Management
BE 5324 Consumer Behavior
BE 5325 Customer Relationship Management
BE 5332 Integrated Marketing Communications
BE 5326 Digital Marketing
BE 5327 Emerging Media
BE 5328 Experiential and Content Marketing
BE 5329 Export Marketing
BE 5331 Global Marketing
BE 5335 SAP Sales and Distribution Module

Finance

BE 5425 International Banking and Finance
BE 5423 Corporate Finance
BE 5426 Islamic Banking and Finance
BE 5421 Analysis of Financial Statements
BE 5427 Portfolio and Investment Management
BE 5428 Project Evaluation
BE 5422 Banking Operations
BE 5424 Financial Modeling
BE 5429 Treasury and Funds Management
BE 5431 SAP Financial Accounting Module
BE 5432 SAP Management Accounting Module

Human Resource Management

BE 5525 Leadership and Motivational Techniques
BE 5521 Compensation Management
BE 5527 Recruitment and Selection
BE 5526 Performance Appraisal
BE 5531 Training and Development
BE 5522 Conflict Resolution
BE 5523 Crisis Management
BE 5524 HR Analytics
BE 5528 Salary and Compensation
BE 5529 Talent Management and Succession Planning
BE 5532 SAP Human Capital Module

Supply Chain Management

BE 5631 Supply Chain Management
BE 5623 Dynamics of Logistics and Distribution
BE 5626 Operational Planning in Supply Chain
BE 5627 Strategic Procurement in SCM
BE 5621 Advance Manufacturing and TPM in SCM
BE 5622 Detailed Scheduling and Planning in SCM
BE 5624 Execution and Control of Operations in SCM
BE 5629 Supply Chain Finance

BE 5632 SAP Procurement Module
BE 5633 SAP Production-Planning and Manufacturing Module

The University reserves the right to change its programs and policies at any time without prior notification. All courses may not be offered every year. Alternate courses may be substituted as and when needed.

MBA Program

For students with 4-year undergraduate degree/16-years of education, the minimum duration of the MBA program is 2 years. Twenty-two courses (66 credit hours) and 6 credit hours of Research Project OR Thesis spread over two semesters (3+3) are required to complete the program. Students are also required to complete a six-week internship. The maximum duration to complete MBA program is 4 years. MBA Program is also accredited by National Business Education Accreditation Council (NBEAC).

First Year

Fall Semester
BA 5301 Financial Accounting*
BA 5419 Business Management and Ethics*
BA 5418 Managerial Communication*
BA 5502 Quantitative Tools for Managers*
BA 5302 Microeconomics*
BA 5106 Marketing Management*

Spring Semester
BA 5402 Macroeconomics*
BA 5205 Human Resources Management*
BA 5411 Cost and Management Accounting*
BA 5401 Introduction to Business Finance*
BA 5405 Statistical Inference*
BA 5501 Applied Research Methods

Second Year

Fall Semester
BA 5308 International Business
BA 5601 Strategic HRM
BA 5105 Financial Management*
BA 5203 Strategic Marketing
BA 5xxx Elective-I
BA 5508 Research Project-I (3 Credits) OR
BA 5507 Thesis-I (3 Credits)

Spring Semester
BA 5104 Strategic Management
BA 5208 Strategic Finance
BA 5xxx Elective-II
BA 5xxx Elective-III
BA 5xxx Elective-IV
BA 5608 Research Project - II (3 Credits)
BA 5607 OR Thesis-II (3 Credits)

* Exempted courses for BBA and Equivalent degree holders

The students with 4-year BBA/BABS/BS (Accounting & Finance)/BS (Entrepreneurship) or equivalent degree are exempted 36 credit hours of course work. The minimum duration of degree for such students will be 1.5-year with the following program structure:

First Year

Fall Semester
BA 5501 Applied Research Methods
BA 5203 Strategic Marketing
BA 5601 Strategic HRM
BA 5208 Strategic Finance

Spring Semester
BA 5104 Strategic Management
BA 5xxx Elective-I
BA 5xxx Elective-II
BA 5508 Research Project-I (3 Credits) Or
BA 5507 Thesis-I (3 Credits)

Second Year

Fall Semester
BA 5308 International Business
BA 5xxx Elective-III
BA 5xxx Elective-IV
BA 5608 Research Project-II (3 Credits) Or
BA 5607 Thesis-II (3 Credits)

All courses may not be offered in every semester. Alternative courses may be substituted as and when required.

*A student may take either Research Project or Thesis.

FACULTY OF MANAGEMENT SCIENCES

PROGRAM ELECTIVES

Finance

BA 5131 Advance Financial Management
BA 5132 Analysis of Financial Statements
BA 5133 Corporate Finance
BA 5134 Derivatives
BA 5135 Financial Markets and Institutions
BA 5138 Econometrics
BA 5139 Financial Risk Analysis
BA 5151 International Finance
BA 5155 Mergers and Acquisitions
BA 5179 Commodity Pricing
BA 5187 Business Analysis and Forecasting
BA 5229 Financial Modeling
BA 5232 Portfolio and Investment Management
BA 5254 Fundamentals of Financial Engineering
BA 5262 Behavioral Finance
BA 5284 Theory and Practice of Lending
BA 5192 Financial Management Policy
BA 5294 Venture Capital and Private Equity
BA 5298 Financial Reporting and Analysis
BA 5454 Real Estate Investments and Finance
BA 5xxx FinTech

Banking

BA 5137 International Banking
BA 5175 Banking Operations
BA 5184 Financial Product Regulations
BA 5231 Islamic Banking and Finance
BA 5235 Treasury and Funds Management
BA 5244 Investment Banking
BA 5273 Prudential Regulations
BA 5278 Banking Crises and Management

Human Resource Management

BA 5114 Leadership and Motivation Techniques
BA 5118 Compensation Management
BA 5117 Performance Appraisal
BA 5159 Salary and Compensation
BA 5164 Human Resources Information Systems
BA 5165 Job Analysis and Design
BA 5167 Talent Management and Succession Planning
BA 5185 Leadership Development
BA 5193 HR Operations and Business Partnering
BA 5196 Conflict Resolution
BA 5215 Recruitment and Selection
BA 5216 Training and Development
BA 5239 HR Policy Development
BA 5251 Human Resource Development
BA 5285 Performance Management
BA 5292 HR Analytics
BA 5297 Human Capital Development and Analytics
BA 5335 Human Resource Audit
BA 5332 Contemporary Issues in Human Resource Management
BA 5435 Human Resource Management and Technology
BA 5452 Psychological Contract in Organizations
BA 5xxx Leadership in Practice

Management

BA 5111 Business Process Re-engineering
BA 5112 Change Management
BA 5113 Industrial Management and Labor Relations
BA 5116 Industrial Relations and Labor Laws
BA 5136 Business Strategy and Policy
BA 5152 Event Management
BA 5172 Entrepreneurial Business Strategy
BA 5213 Project Management
BA 5295 Crisis Management
BA 5334 Corporate Sustainability
BA 5242 Lean Six Sigma Manufacturing
BA 5434 Hospitality and Tourism Management
BA 5333 Business Theory
BA 5433 Business Application

MIS

BA 5156 e-Commerce Strategies and Management
BA 5163 Enterprise Resource Planning
BA 5169 Technology Management and Innovation
BA 5181 Business Intelligence and Data Warehousing
BA 5241 e-Commerce

Business Analytics

BA 5xxx Business Data Visualization
BA 5xxx Business Intelligence and Data Warehousing
BA 5xxx Data Analytics for Business

Marketing

BA 5121 Advertising
BA 5122 Brand Management
BA 5123 Consumer Behavior
BA 5124 Customer Relationship Management
BA 5126 Export Marketing
BA 5127 Global Marketing

FACULTY OF MANAGEMENT SCIENCES

BA 5129 Services Marketing
BA 5171 Strategic Advertising
BA 5182 Trade Marketing
BA 5186 Social Marketing
BA 5199 Integrated Brand Communication
BA 5217 Industrial Marketing
BA 5224 Media Planning and Management
BA 5225 Personal Selling
BA 5226 Pharmaceutical Marketing
BA 5227 Sales Management
BA 5228 Retail Management
BA 5246 Public Relations
BA 5256 Integrated Marketing Communications
BA 5259 Emerging Media
BA 5264 Interactive Global and Regional Marketing
BA 5269 Marketing Intelligence
BA 5281 Digital Marketing
BA 5286 Media Marketing
BA 5293 New Product Development Process and Innovation
BA 5296 Rural Marketing
BA 5198 Experiential and Content Marketing
BA 5299 Media Management
BA 5141 Public Relations Management
BA 5438 Marketing Practices in Pakistan
BA 5331 Marketing Analytics
BA 5339 Packaging for Brands
BA 5337 Retail Strategy and Structure
BA 5437 Retail Supply Chain Management
BA 5436 Retail Operation
BA 5336 Retail Buying and Merchandising
BA 5451 Strategic Entrepreneurship
BA 5355 Marketing Strategies for Emerging Economies

Supply Chain Management (SCM)

BA 5191 Advance Manufacturing and TPM in SCM
BA 5194 Supply Chain Finance
BA 5214 Supply Chain Management
BA 5263 Dynamics of Logistics and Distribution
BA 5265 Operational Planning in Supply Chain
BA 5266 Strategic Procurement in SCM
BA 5287 Execution and Control of Operations in SCM
BA 5291 Detailed Scheduling and Planning in SCM
BA 5142 Materials Management
BA 5338 Shipping in SCM
BA 5432 Green Supply Chain Management
BA 5431 Supply Chain Operations
BA 5449 Strategic Warehouse Management
BA 5439 Green Logistics
BA 5xxx Demand Planning and Forecasting in Supply Chain
BA 5xxx Distribution and Supply Chain Network Design
BA 5xxx International Trade Procedures and Practices
BA 5xxx Digital Supply Chain

Non-Credit Hours Course

BA 5110 Software Tools for Business

Internship

All MBA students are required to complete a 6-week internship. Completion of internship is a degree requirement for all MBA programs. Students can produce their current employment record as an alternative to the internship program provided such employment experience is recognized by SZABIST.

FACULTY OF MANAGEMENT SCIENCES

Master of Project Management (MPM)

Master of Project Management is designed to provide individuals with cutting edge insights of project management to manage complex projects. Through this one year degree program, students can gain actionable knowledge for real-world challenges which goes beyond traditional project management fundamentals. The classes are offered on weekdays (Monday to Friday) as well as on Weekends (Friday to Sunday). It comprises of 30 credit hours spread over two semesters. Minimum ten courses are required to graduate. The maximum time to complete the degree is 4 years.

PROGRAM OBJECTIVES

- To build proficiency in advance knowledge of project management processes group (project life cycle).
- To build, integrate and apply project management knowledge areas, tools, techniques, and contemporary best practices through project life cycle for projects' outcomes.
- To determine the strategic intent of the organization and integrate it into portfolio and project objectives and outcomes for sustainable organizational competitiveness in changing environment.
- To develop leadership skills in developing project team and managing stakeholders' relationship effectively in multi-context projects.
- To support and demonstrate ethical and professional behavior and compliance to legal and regulatory requirements relating to projects.
- To produce a comprehensive project plan in multi-context environment

PROGRAM LEARNING OUTCOMES

- Integrate and evaluate management knowledge areas, best practices, and emerging trends in making projects' related decisions through projects' life cycle in organizations.
- Build and apply enhanced competence in organizational strategic intent and integrate it into planning and governance through the project life cycle of national and international projects.
- Evaluate and apply leadership skills (emotional intelligence, communication, and interpersonal skills, team building, problem-solving negotiation, and conflict resolution) in developing engagement and building partnerships with stakeholders to create synergy in multi-context projects in a complex business environment.
- Integrate and apply appropriate tools, techniques, and project management approaches in managing projects effectively.
- Demonstrate ethical and professional behavior and compliance to legal and regulatory requirements through the project life cycle.
- Create and present a comprehensive project plan is relevant to students' professional domains.

First Year

Fall Semester

PM 5113	Principles of Project Management
PM 5112	Organizational Project Management
PM 5111	Leadership and Work Ethics
PM 5114	Project Scope and Scheduling Management
PM 5104	Cost and Financial Management for Project Management

Spring Semester

PM 5351	Project Risk Management
PM 5207	Software Tools for Project Management
PM 5xxx	Elective-I
PM 5xxx	Elective-II
PM 5208	Capstone Project

FACULTY OF MANAGEMENT SCIENCES

ELECTIVE

IT/Telecom

PM 5157 Agile Project Management
PM 5152 Innovation and Technology Management
PM 5159 Project Analytics
PM 5162 Telecom Project Management
PM 5158 Digital Project Management
PM 5161 Project Resource and Communication Management

Govt/NGO

PM 5361 Government Planning and Development Management
PM 5364 Public Private Partnership Management
PM 5362 NGO Project Management
PM 5363 Project Governance, Monitoring, and Evaluation
PM 5365 Sustainable Development Projects
PM 5155 Project Program Portfolio Management

Construction/Manufacturing

PM 5259 Construction Project Management
PM 5263 Project Procurement and Contractual Management
PM 5264 Project Simulation
PM 5301 Project Quality Management
PM 5261 Blockchain Project Management
PM 5262 Construction Quality and Cost Management

All courses may not be offered every semester. Alternative courses may be substituted as and when required.

MPM students may switch to the MSPM program before the third week of the first semester or after the first semester, with relevant courses transferred and subject to meeting MSPM admission requirements. This option cannot be exercised in and after the second semester.

FACULTY OF MANAGEMENT SCIENCES

Master of Science in Project Management (MSPM)

SZABIST offers MS in Project Management (MSPM) program which is equivalent to MPhil. The program lays the foundation for students who are planning to pursue doctoral studies. This program offers two streams for MSPM. The first stream is coursework-based and the second is research-based.

In either stream, students are required to complete 30 credit hours. The maximum time limit to complete the MSPM degree is four years and the minimum time to complete is 1.5/2 years. All MSPM students are required to clear GRE, GAT General test, or HAT relevant with a minimum 50% score.

Research Work-Based Stream

- Five compulsory courses (15 credit hours)
- Two Independent Research Studies (6 credit hours) OR Thesis (6 credit hours)
- Three elective courses (09 credit hours)

Course Work-Based Stream

- Five compulsory courses (15 credit hours)
- Five elective courses (15 credit hours)

First Year

Fall Semester

MP 5107 Fundamentals of Project Management
MP 5113 Strategic Management and Leadership
MP 5103 Research Methodology
MP 5xxx Elective-I

Spring Semester

MP 5202 Quantitative Tools for Research
MP 5213 Case Studies in Project Management
MP 5xxx Elective-II
MP 5xxx Elective-III

Second Year

Fall Semester

MP 5xxx Thesis-I* OR Independent Research Study-I*/Elective-IV**
MP 5xxx Independent Research Study - II/Elective-V**

Spring Semester

MP 5xxx Thesis-II

* Thesis to be registered in two parts while Independent Research Study-I and Independent Research Study-II can be opted in one semester by research stream students.

** Elective-V and Elective-VI to be opted by students following course work scheme.

MSPM students may switch to the MPM program after admissions before the third week of the first semester or after completion of first semester. This option; however, cannot be exercised in and after the second semester.

ELECTIVES

MP 5102 Project Management Constraints
MP 5201 Quality Management Tools
MP 5205 Theories of Management
MP 5215 Human Resource Management Communication
MP 5217 Financial Decision Analysis
MP 5218 Software Project Management
MP 5224 Project Scope
MP 5223 Project Scheduling, Planning and Time Management
MP 5226 Governance, Monitoring and Evaluation of Development Projects
MP 5314 Project Review, Assurance and Governance
MP 5317 Supply Chain Management
MP 5318 Business Analysis
MP 5324 Risk Management Dynamics
MP 5325 Project Simulation
MP 5328 Project Risk Management

Elective courses may vary from time to time. All courses may not necessarily be offered every year. Alternate courses may be substituted as and when required.

Students cannot register in Independent Research Study (IRS) or Thesis without completion of Research Methodology and Quantitative Tools for Research. To register in thesis students are also required to complete course work before registering for Thesis.

The maximum course load for a semester is 4 courses (12 credit hours). Summer is not a regular semester; therefore, courses are not offered on a regular basis regularly in summer.

MS (Project Management) Bridge Arrangement

This arrangement allows MPM graduates to enhance their academic qualification. For MPM (30 Credits Program) graduates, a maximum of 5 courses would be transferred to the MSPM program and for MPM (33 Credits Program) graduates, a maximum of six courses can be transferred to the MSPM program; subject to passing the courses with a minimum 2.75-grade points point and on surrendering the MPM degree. The Project, Project in Primavera, IT Tools for Project Management, and SAP Training are not transferrable towards MSPM degree completion requirements for MPM graduates.

All MSPM candidates are required to pass HAT relevant/GAT General with a minimum 50% score or GRE score as applicable for the MS program.

FACULTY OF MANAGEMENT SCIENCES

Master of Science in Management Sciences

There are two streams available for Master of Science in Management Sciences. One Stream is by Course Work and other one is by Research Work. In Course Work Stream, the student is required to complete 10 courses of 3 credit hours each. In the Research Work Stream, the student is required to complete 8 Courses and Two IRS OR one Thesis of Six credit hours. In both the streams, 30 credit hours are to be completed. The time limit to earn an MS degree is from 1.5 to 4 years. The detail of two streams is as follows:

1. MS By Course Work Stream

The Scheme of Study is as follows:

- Six Compulsory Courses
- Four Program Electives
- No IRS or Thesis

Compulsory Courses

MS 5137 Research Methods and Techniques
MS 5204 Quantitative Tools for Research
MS 5132 Applied Strategic Management
MS 5104 Strategic Marketing Decisions
MS 5318 Strategic Finance
MS 5238 Strategic Human Resource Development

Program Electives (Program Electives in any of following areas subject to the offering of Course)

- Finance
- Marketing
- Human Resource Management
- Business Analytics

First Year

Fall Semester

MS 5137 Research Methods and Techniques
MS 5132 Applied Strategic Management
MS 5238 Strategic Human Resource Development
MS 5104 Strategic Marketing Decisions

Spring Semester

MS 5204 Quantitative Tools for Research
MS 5318 Strategic Finance
MS 5xxx Program Elective I
MS 5xxx Program Elective II

Second Year

Fall Semester

MS 5xxx Program Elective III
MS 5xxx Program Elective IV

2. MS By Research Work Stream

The Scheme of Study is as follows:

- Six Compulsory Courses
- Two Program Electives
- Two IRS OR Thesis

Compulsory Courses

MS 5137 Research Methods and Techniques
MS 5204 Quantitative Tools for Research
MS 5132 Applied Strategic Management
MS 5104 Strategic Marketing Decisions
MS 5318 Strategic Finance
MS 5238 Strategic Human Resource Development

Program Electives (Program Electives in any of following areas subject to the offering of Course)

- Finance
- Marketing
- Human Resource Management
- Business Analytics

First Year

Fall Semester

MS 5137 Research Methods and Techniques
MS 5132 Applied Strategic Management
MS 5238 Strategic Human Resource Development
MS 5104 Strategic Marketing Decisions

Spring Semester

MS 5204 Quantitative Tools for Research
MS 5318 Strategic Finance
MS 5xxx Program Elective I
MS 5xxx Program Elective II

Second Year

Fall Semester

MS 5xxx IRS I and IRS II OR
MS 5xxx Thesis (Part I)

Spring Semester

MS 5xxx Thesis (Part II) If Any

FACULTY OF MANAGEMENT SCIENCES

PROGRAM ELECTIVES

Finance

MS 5113 Financial Time Series
MS 5103 Managerial Economics
MS 5105 Econometrics
MS 5111 Derivatives and Financial Risk
MS 5115 Operations and Mathematical Modeling
MS 5134 Behavioral Finance
MS 5206 Modern Financial Applications
MS 5215 Corporate Finance
MS 5217 Corporate Finance Planning and Decisions
MS 5218 Financial Markets
MS 5237 Business Finance and Decision Making
MS 5414 Applied Econometrics
MS 5421 Capital Asset Pricing Model
MS 5425 Empirical Asset Pricing
MS 5317 Seminars in Finance
MS 5426 Mathematical Modeling in Finance
MS 5412 Islamic Banking and Finance
MS 5461 Fintech/Data Science for Finance
MS 5452 Applied Time Series Analysis for With Software Forecasting
MS 5469 Risk Management
MS 5459 Financial Modelling with Software

Marketing

MS 5301 Seminars in Marketing
MS 5422 Distribution and Channel Management
MS 5424 Strategic Brand Management
MS 5429 Marketing Metrics
MS 5431 Strategic Entrepreneurial Marketing
MS 5432 Strategic Social Marketing
MS 5428 Global Marketing Strategies
MS 5433 Advertising Research
MS 5434 Behavioral Marketing
MS 5456 Digital Marketing and Social Media
MS 5468 Retailing and Analytics
MS 5465 Market Strategy and Forecasting
MS 5453 Customer Relations Management

Human Resource Management

MS 5101 Change Management
MS 5102 Organizational Development
MS 5202 Organizational Strategies and Effectiveness
MS 5203 Global Corporate Strategy
MS 5205 International Business Management
MS 5211 Creative Leadership
MS 5216 Corporate Governance
MS 5225 Leadership and Motivation Techniques
MS 5229 Negotiations and Conflict Resolution
MS 5241 Public Administration and Governance
MS 5245 System Thinking and Organizational Learning
MS 5303 Issues in Strategic Management
MS 5415 NGO Management
MS 5423 Global Governance and Development
MS 5427 Seminars in HRM

Business Analytics

MS 5467 Tools for Data Analytics (Mandatory for Business Analytics Students)
MS 5454 Data Mining

Finance

MS 5461 Fintech/Data Science for Finance
MS 5452 Applied Time Series Analysis for With Software Forecasting
MS 5469 Risk Management
MS 5459 Financial Modelling with Software

Marketing

MS 5456 Digital Marketing and Social Media
MS 5468 Retailing and Analytics
MS 5465 Market Strategy and Forecasting
MS 5453 Customer Relations Management

Management/HRM

MS 5455 Decision Support System
MS 5464 Management Models
MS 5457 Disaster Management (GIS)
MS 5463 HR Analytics
MS 5466 Performance Management

Supply Chain Management

MS 5471 Strategies for Managing Supply Chain
MS 5451 Advanced Warehouse, Stores and Material Management
MS 5462 Green Supply Chain Management
MS 5458 Distribution Networks

Program Elective courses may vary from time to time. All courses may not necessarily be offered every year. Alternate courses may be substituted as and when required.

Students cannot register in Independent Research Study (IRS) OR thesis without completing six compulsory courses.

Maximum course load for a semester is 4 courses (12 credit hours). Summer is not a regular semester; therefore, courses are not offered on a regular basis in summer. A student can take maximum two interdisciplinary elective courses in SS/CS/IT/ Media/MBA program with the prior approval of respective program managers.

FACULTY OF MANAGEMENT SCIENCES

PhD Management Science

For PhD Program, students are required to complete 48 credit hours. Five courses of 3 credit hours each, one Independent Research Study of 3 credit hours and one dissertation of 30 credit hours are required. Following are the important points for PhD in Management Sciences:

- There are two compulsory courses in PhD i.e. Advanced Research Methods and Techniques and Advanced Quantitative Tools for Research.
- Students cannot register in IRS before completing all compulsory courses.
- Candidate may be given prerequisite/deficiency courses or thesis which will be decided by the Interview Board at the time of admission.
- Prerequisite Courses are non-credit courses.
- The student will not be allowed to register in Compulsory Courses before completing prerequisite courses/ thesis if any.
- Dissertation of 30 credit hours is Compulsory.
- Registration in Dissertation is allowed after passing Comprehensive Examination, GAT- Subject Test and maintaining minimum CGPA requirement.
- All the requirements of HEC must be fulfilled which include the following:
  - Passing GAT Subject with minimum 60%.
  - Maintaining minimum CGPA requirement for each course and for entire program.
  - Passing Comprehensive examination to establish the PhD candidacy (maximum 2 attempts allowed).
  - Publishing one Research Paper from the thesis in W,X, and Y-category journal before the completion of 30 Credit Hours Dissertation.
- Program Elective courses to be selected from the specialized area of Marketing, Finance and Human Resource Management.
- Maximum course load for each semester is 9 credit hours.
- Time duration for PhD is Minimum 3 years and Maximum 8 years.
- All general guidelines mentioned in DOCTORAL DEGREE PROGRAMS are applicable to PhD-Management Science.

First Year

Fall Semester

MS 6106	Advanced Research Methods and Techniques
MS 6216	Advanced Quantitative Tools for Research
MS 6xxx	Program Elective I

Spring Semester

MS 6xxx	Program Elective II
MS 6xxx	Program Elective III
MS 6xxx	Independent Research Study

Second Year

Fall Semester

MS 6xxx	Dissertation (Proposal in One or Two Semester)

Spring Semester

MS 6xxx	Dissertation

FACULTY OF MANAGEMENT SCIENCES

Third Year

Fall Semester

MS 6xxx Dissertation

Spring Semester

MS 6xxx Dissertation

PROGRAM ELECTIVES

Finance

MS 6111 Business Finance and Decision Making
MS 6113 Applied Econometrics
MS 6202 Econometrics
MS 6315 Capital Asset Pricing Model
MS 6317 Empirical Asset Pricing
MS 6318 Financial Markets
MS 6319 Modern Financial Applications
MS 6322 Behavioral Finance
MS 6323 Corporate Finance
MS 6411 Financial Time Series
MS 6418 Operations and Mathematical Modeling
MS 6429 Islamic Banking and Finance
MS 6421 Corporate Finance Planning and Decision
MS 6422 Derivatives and Financial Risk
MS 6423 Managerial Economics
MS 6325 Seminars in Finance
MS 6425 Strategic Finance
MS 6434 Mathematical Modeling in Finance

Marketing

MS 6204 Strategic Marketing Decisions
MS 6215 Seminars in Marketing
MS 6312 Advance Marketing Strategy
MS 6316 Distribution and Channel Management
MS 6415 Strategic Brand Management
MS 6431 Marketing Metrics
MS 6432 Strategic Entrepreneurial Marketing
MS 6433 Strategic Social Marketing
MS 6428 Global Marketing Strategies
MS 6326 Advertising Research
MS 6435 Behavioral Marketing

Human Resource Management

MS 6112 Strategic Human Resource Development
MS 6114 NGO Management
MS 6201 Change Management
MS 6205 Public Administration and Governance
MS 6211 Organizational Development
MS 6311 Corporate Governance
MS 6314 Global Corporate Strategy
MS 6321 Organizational Strategies and Effectiveness
MS 6324 Issues in Strategic Management
MS 6412 Creative Leadership
MS 6413 International Business Management
MS 6414 Global Governance and Development
MS 6416 Negotiations and Conflict Resolution
MS 6417 Leadership and Motivation Techniques
MS 6419 System Thinking and Organizational Learning
MS 6427 Applied Strategic Management
MS 6424 Strategic Management
MS 6426 Seminars in HRM

Program Elective courses may vary from time to time. All courses may not necessarily be offered every year. Alternate courses may be substituted as and when required.

Course registration is subjected to course offering as per Zabdesk each semester. The above course plan is tentative for basic understanding. Students can register in any number of offered course/s but not exceeding 3 courses (9 credit hours) per semester. One extra course can be allowed depending on the approval of program manager. Summer is not a regular semester and no fresh registration is offered during Summer. A student can take maximum two interdisciplinary elective courses in SS/CS/IT/Media/MBA program with the prior approval of respective program managers.

FACULTY OF COMPUTING AND ENGINEERING SCIENCES

DEPARTMENT OF COMPUTING

The Department of Computing is aimed to produce **globally recognized scientific and technological experts** in the field of computing. In the recent decade the computer science has played a catalytic role for many real-world applications. This includes, but not limited to, banking, software house, education, government, commerce, security, healthcare etc. The Department of Computing at SZABIST is committed to produce quality graduated who can satisfy the **national and global contemporary scientific and technological needs**. The students are encouraged to render **cutting edge research & development** in the domain of computing to handle **socio-economic challenges**.

PROGRAMS

The Department of Computing at SZABIST offers degree program both at undergraduate and graduate level. All programs being offered in the Department of Computing are fully in-line with the guidance of Higher Education Commission and in accordance with the national and global industrial needs. The programs being offered at the Department of Computing are accredited by National Computing Education Accreditation Council (NCEAC), Pakistan. The Department of Computing offers following degree programs:

- Bachelors of Science in Computer Science
- Bachelors of Science in Software Engineering
- Masters of Science in Cyber Security
- Masters of Science in Computer Science
- Doctor of Philosophy in Computing

FACULTY OF COMPUTING AND ENGINEERING SCIENCES

BS Computer Science

The program is offered through a well-trained foreign qualified faculty. It consists of 41 courses (five/six courses per semester) with a total of 130 credit hours. BSCS Program is accredited by NCEAC. The maximum time to complete the degree is six years.

BS (Computer Science) COURSE PLAN (ROADMAP)

Sem.	Codes	Course Title	Cr.Hrs.		Pre-Req.
First Year					
		Fall Semester			
	CSC 1101	Calculus and Analytical Geometry	3, 0	3	
	CSC 1102	English Composition and Comprehension	3, 0	3	
	CSC 1103	Fundamentals of Programming	3, 0	3	
	CSCL 1103	Lab : Fundamentals of Programming	0, 1	1	
	CSC 1107	Applied Physics	2, 0	2	
	CSCL 1107	Lab : Applied Physics	0, 1	1	
	CSC 1108	Introduction to Computer Science	2, 0	2	
	CSCL1108	Lab : Introduction to Computer Science	0, 1	1	
	CSC 1109	Pakistan Studies	2, 0	2	
			18		
		Spring Semester			
	CSC 1208	Object Oriented Programming Techniques	3, 0	3	CSC 1103
	CSCL 1208	Lab: Object Oriented Programming Techniques	0, 1	1	CSCL 1103
	CSC 2101	Communication and Presentation Skills	3, 0	3	CSC 1102
	CSC 2103	Digital Logic Design	3, 0	3	CSC 1107
	CSCL 2103	Lab: Digital Logic Design	0, 1	1	CSCL 1107
	CSC 1206	Probability and Statistics	3, 0	3	
	CSC 1209	Islamic Studies/ Humanities	2, 0	2	
			16		
Second Year					
		Fall Semester			
	CSC 1201	Discrete Mathematical Structures	3, 0	3	
	CSC 2102	Data Structures and Algorithms	3, 0	3	CSC 1208
	CSCL 2102	Lab: Data Structures and Algorithms	0, 1	1	CSCL 1208
	CSC 2201	Computer Organization and Assembly Language	3, 0	3	
	CSCL 2201	Lab: Computer Organization and Assembly Language	0, 1	1	
	CSC xxxx	University Elective-1	3, 0	3	
	CSC xxxx	CS Supporting-1	3, 0	3	
			17		
		Spring Semester			
	CSC 2203	Database Systems	3, 0	3	CSC 2102
	CSCL 2203	Lab: Database Systems	0, 1	1	CSCL 2102
	CSC 2204	Finite Automata Theory and Formal Languages	3, 0	3	
	CSC 2206	Linear Algebra	3, 0	3	
	CSC 3202	Design and Analysis of Algorithms	3, 0	3	CSC 2102
	CSC xxxx	University Elective -2	3, 0	3	
			16		

FACULTY OF COMPUTING AND ENGINEERING SCIENCES

Third Year					
Fall Semester					
	CSC 2205	Operating Systems	3, 0	3	CSC 2102
	CSCL 2205	Lab: Operating Systems	0, 1	1	
	CSC 3109	Software Engineering	3, 0	3	
	CSC 3201	Compiler Construction	3, 0	3	CSC 2204
	CSC xxxx	CS Supporting -2	3, 0	3	
	CSC xxxx	CS Supporting-3	3, 0	3	
			16		
Spring Semester					
	CSC 1205	Technical and Business Writing	3,0	3	
	CSC 3205	Computer Networks and Data Communications	3, 0	3	
	CSCL 3205	Lab: Computer Networks and Data Communications	0, 1	1	
	CSC 4101	Artificial Intelligence	3, 0	3	CSC1201
	CSCL 4101	Lab: Artificial Intelligence	0, 1	1	
	CSC 4xxx	CS Elective-1	3, 0	3	
	CSC 4xxx	CS Elective-2	3, 0	3	
			17		

Fourth Year					
Fall Semester					
	CSC 4105	Final Year Project-I	0, 3	3	
	CSC 4106	Parallel and Distributed Computing	3, 0	3	CSC 2205
	CSC 4xxx	CS Elective-3	3, 0	3	
	CSC 4102	Professional Practices	3, 0	3	
	CSC xxxx	University Elective-3	3, 0	3	
			15		
Spring Semester					
	CSC 4201	Information Security	3, 0	3	
	CSC 4205	Final Year Project-II	0, 3	3	
	CSC 4xxx	CS Elective-4	3, 0	3	
	CSC 4xxx	CS Elective-5	3, 0	3	
	CSC xxxx	University Elective-4	3, 0	3	
			15		
			130		

**A CSC xxxx Mathematics deficiency course will be offered to those students who have limited mathematical background (if deemed necessary by relevant PM/HOD).

FACULTY OF COMPUTING AND ENGINEERING SCIENCES

CS ELECTIVES

CSC 4802 Android Application Development
CSC 4703 Applied Data Mining
CSC 4803 Auditing Information Systems
CSC 4804 Business Process Re-engineering
CSC 4705 Control Systems
CSC 4805 Data and Network Security
CSC 4807 Embedded Programming
CSC 4708 Enterprise Resource Planning
CSC 4808 Ethical Hacking
CSC 4709 Internet Business Models
CSC 4809 iOS Development
CSC 4712 IT Innovations
CSC 4713 Managing Data-Center Projects
CSC 4812 Mechatronics
CSC 4813 Modeling and Simulation
CSC 4714 Network Security and Encryption
CSC 4815 Software Engineering-II
CSC 4814 Software Project Management
CSC 4716 Switching and Routing
CSC 4816 Technopreneurship
CSC 4717 Web Technologies-I
CSC 4817 Web Technologies-II
CSC 4718 Wireless and Mobile Technologies
CSC 4823 Interaction Design
CSC 4719 Game Development
CSC 4721 Introduction to Cloud Computing
CSC 4822 Software Engineering Economics
CSC 4818 Data Sciences
CSC 4824 Embedded Systems
CSC 4825 Computer Graphics
CSC 4722 Introduction to Blockchain Technology
CSC 4723 Blockchain and Smart Contract Development
CSC 4724 User Interface Design
CSC 4725 Introduction to Development and Operation
CSC XXXX Systems and Network Administration

UNIVERSITY ELECTIVES

Each campus may offer university electives as per convenience and availability of resources. The Electives being offered at Karachi Campus as are as follows:

CSC 4501 Business and Technology Ethics
CSC 4606 Psychology
CSC 4605 Sociology
CSC 4601 Foreign Languages
CSC 4502 Design and Creativity
CSC 4602 History of Scientific Ideas
CSC 4503 Introduction to Accounting
CSC 4603 Management Principles
CSC 4504 Organizational Behavior
CSC 4604 Research Report

COMPUTER SCIENCE SUPPORTING COURSES

Coverage of relevant pre-requisite will be ensured while allowing any of the following courses from this category:

CSC 2122 Differential Equations
CSC 1202 Multivariate Calculus
CSC 2123 Graph Theory
CSC 2121 Theory of Programming Languages
CSC 3203 Numerical Computing

DISTRIBUTION OF CREDIT HOURS

Course Group		Cr. Hrs.	%
Computing	Core Courses	39	30%
	Supporting Areas	12	9%
	General Education	19	15%
Computer Science	Core Courses	24	18%
	Electives	15	12%
	Supporting Courses	9	7%
University Electives		12	9%
	Total	**130**	**100%**

Internship

The internship is scheduled for summer at the end of third year. After completion of the six-week internship, all students are required to submit a comprehensive report giving details of their experience and learning.

FACULTY OF COMPUTING AND ENGINEERING SCIENCES

BS SOFTWARE ENGINEERING

The BS Software Engineering program at SZABIST is a full-time four year degree program comprising eight semesters with minimum of 130 credit hours. The degree program is designed around a set of courses pertaining to the principles of software analysis, design, architecture, development, testing, and maintenance techniques that are necessary to produce high-quality software systems. Some additional courses from the disciplines of Computer Science, Mathematics, Management Science, and Humanities are part of the degree program to develop a broader knowledge base of the students.

The BS Software Engineering program is offered through a trained foreign qualified faculty. It consists of 42 courses with a total of 130 credits hours. The maximum duration to complete the degree is six years.

BS (SOFTWARE ENGINEERING) COURSE PLAN (ROADMAP)

Sem.	Codes	Course Title	Cr.Hrs.		Pre-Req.
First Year					
		Semester -1st			
	CSC 1101	Calculus and Analytical Geometry	3, 0	3	
	CSC 1102	English Composition and Comprehension	3, 0	3	-
	CSC 1103	Fundamentals of Programming	3, 0	3	-
	CSCL 1103	Lab: Fundamentals of Programming	0, 1	1	-
	CSC 1107	Applied Physics	2, 0	2	-
	CSCL 1107	Lab : Applied Physics	0, 1	1	-
	CSC 1108	Introduction to Computer Science	2, 0	2	-
	CSCL 1108	Lab: Introduction to Computer Science	0, 1	1	-
	CSC 1109	Pakistan Studies	2, 0	2	-
		Sub-total	18		
		Semester -2nd			
	CSC 1208	Object Oriented Programming Techniques	3, 0	3	CSC 1103
	CSCL 1208	Lab: Object Oriented Programming Techniques	0, 1	1	CSC 1103
	CSC 2101	Communication and Presentation Skills	3, 0	3	CSC 1102
	CSC 3109	Software Engineering	3, 0	3	-
	CSC 1201	Discrete Mathematical Structures	3, 0	3	-
	CSC 1209	Islamic Studies/ Humanities	2, 0	2	-
	SEC xxxx	University Elective-I	3, 0	3	-
		Sub-total	18		
Second Year					
		Semester -3rd			
	CSC 2102	Data Structures and Algorithms	3, 0	3	CSC 1208
	CSCL 2102	Lab: Data Structures and Algorithms	0, 1	1	CSC 1208
	SEC 2403	Software Requirement Engineering	3, 0	3	CSC 3104
	SEC 2103	Human Computer Interaction	3, 0	3	CSC 3104
	CSC 2206	Linear Algebra	3, 0	3	
	SEC xxxx	University Elective-II	3, 0	3	
		Sub-total	16		

FACULTY OF COMPUTING AND ENGINEERING SCIENCES

Sem.	Codes	Course Title	Cr.Hrs.		Pre-Req.
		Semester -4th			
	CSC 2205	Operating Systems	3, 0	3	CSC 2102
	CSCL 2205	Lab: Operating Systems	0, 1	1	CSC 2102
	CSC 2203	Database Systems	3, 0	3	CSC 2102
	CSCL 2203	Lab: Database Systems	0, 1	1	CSC 2102
	SEC 2404	Software Design and Architecture	2, 0	2	CSC 5163
	SECL 2404	Lab: Software Design and Architecture	0, 1	1	CSC 5163
	CSC 1206	Probability and Statistics	3, 0	3	
	SEC xxxx	University Elective - III	3, 0	3	
		Sub-total	**17**		
		Third Year			
		Semester -5th			
	SEC 3604	Software Construction and Development	2, 0	2	SEC XXX
	SECL 3604	Lab: Software Construction and Development	0, 1	1	SEC XXX
	CSC 3205	Computer Networks and Data Communication	3, 0	3	
	CSCL 3205	Lab: Computer Networks and Data Communication	0, 1	1	
	CSC 1205	Technical and Business Writing	3, 0	3	CSC 2101
	SEC xxxx	SE Supporting -I	3, 0	3	
	SEC xxxx	SE Supporting -II	3, 0	3	
		Sub-total	**16**		
		Semester -6th			
	SEC 3605	Software Quality Engineering	3, 0	3	CSC 3104
	SEC 3617	Information Security	3, 0	3	
	CSC 4102	Professional Practices	3, 0	3	
	SEC 3607	Web Engineering	3, 0	3	
	SEC xxxx	SE Elective - I3, 0	3		
	SEC 4xxx	SE Supporting - III	3, 0	3	
		Sub-total	18		
		Fourth Year			
		Semester -7th			
	SEC 3603	Software Project Management	3, 0	3	CSC 3104
	SEC 3606	Software Re-Engineering	3, 0	3	SEC XXX
	SEC xxxx	SE Elective -II	3, 0	3	
	SEC xxxx	SE Elective - III	3, 0	3	
	CSC 4105	Final Year Project - I	0, 3	3	
		Sub-total	**15**		
		Semester -8th			
	SEC xxxx	SE Elective — IV	3, 0	3	
	SEC xxxx	SE Elective — V	3, 0	3	
	CSC 4205	Final Year Project — II	0, 3	3	CSC 4105
	SEC xxxx	University Elective — IV	3, 0	3	
		Sub-total	**12**		
		Total		**130**	

**A CSC xxxx Mathematics deficiency course will be offered to those students who have limited mathematical background (if deemed necessary by relevant PM/HOD).

FACULTY OF COMPUTING AND ENGINEERING SCIENCES

SE Electives

SEC 4516 Artificial Intelligence
SEC 4537 Parallel and Distributed Computing
SEC 4515 Digital Image Processing
SEC 4528 Game Development
SEC 4532 Introduction to Cloud Computing
SEC 4543 Systems Programming
SEC 4544 Technopreneurship
SEC 3614 Computer Graphics
SEC 4514 Introduction to Data Science
SEC 4534 Modeling and Simulation
SEC 3612 Mobile Application Development
SEC 4521 Agent Based Software Engineering
SEC 4522 Big Data Analytics
SEC 4523 Computational Intelligence
SEC 4524 Computer Vision
SEC 4526 Design Patterns
SEC 4511 e-Commerce
SEC 4527 Formal Methods
SEC 4531 Information Systems Audit
SEC 4533 Management Information Systems
SEC 4535 Multimedia Communication
SEC 4536 Natural Language Processing
SEC 4538 Real Time Systems
SEC 4539 Semantic Web
SEC 4541 Software Engineering Economics
SEC 4542 Software Metrics
SEC 4545 Topics in Software Engineering
SEC 4518 Visual Programming
SEC 4525 Data Encryption and Security
SEC 4529 Global Software Development

SE Supporting courses

SEC 4713 Digital Logic Design
SEC 4714 Business Process Engineering
SEC 4711 Formal Methods in Software Engineering
SEC 4712 Operations Research
SEC 4715 Stochastic Processes

UNIVERSITY ELECTIVES

SEC 3309 Organizational Behavior
SEC 3307 Foreign Languages
SEC 3308 Management Principles
SEC 3306 Sociology
SEC 3311 Psychology
SEC 3301 Introduction to Management
SEC 3302 Financial Accounting
SEC 3303 Human Resource Management

DISTRIBUTION OF CREDIT HOURS

Course Group		Cr. Hrs.	%
Computing	Core Courses	39	31%
Software Engineering	Core Courses	27	18%
	Electives	15	12%
	Supporting	9	7%
General Education		19	14%
University Electives		12	9%
Mathematics and Science Foundation		12	9%
Total		**130**	**100%**

Internship

The internship is scheduled at the end of third year. After completion of the six-week internship, all students are required to submit a comprehensive report, giving details of their experience and learning.

All courses may not be offered in every semester. Elective courses may vary from time to time. Alternative courses may be substituted as and when required.

FACULTY OF COMPUTING AND ENGINEERING SCIENCES

MS Computer Science

SZABIST offers MSCS degree in three domains: Core Computer Science area and in two specialization tracks; i.e., Software Engineering (SE) and Networks and Security (N&S) in order to cater to the market needs. Students have to complete 3 focused courses in any specific domain.

The program is of 2-year duration and is offered in the evening. It requires 33 credit hours to complete. Although the institutional administration emphasize and encourage students to undertake research, they can take two courses in lieu of research in specific domains. If student opts for course work only, he/she is required to complete 11 courses of 3 credit hours each. Else, the student is required to complete 9 courses (27 credit hours) and two Independent Research Studies (6 credit hours) OR one Thesis (6 credit hours).

The maximum time limit to complete the MS degree is 4 years.

Master of Science in Computer Science (In Core Computer Science)

First Year

First Semester

CSC 5105	Research Methodology
CSC 5101	Advanced Algorithms Analysis
CSC 5102	Theory of Computation

Second Semester

CSC 5201	Advanced Operating Systems
CSC 5202	Advanced Computer Architecture
CSC 5xxx	Elective-I (from CS Stream)

Second Year

Third Semester

CSC 5xxx	Thesis/Independent Research Study-I OR Course Work (from CS-Stream)
CSC 5xxx	Elective-II (from CS-Stream)
CSC 5xxx	Elective-III (from CS-Stream)

Fourth Semester

CSC 5xxx	Thesis/Independent Research Study-II OR Course Work (from CS-Stream)
CSC 5xxx	Elective-IV (from CS-Stream)

Master of Science in Computer Science (With Specialization in Software Engineering)

First Year

First Semester

CSC 5105	Research Methodology
CSC 5101	Advanced Algorithms Analysis
CSC 5102	Theory of Computation

Second Semester

CSC 5201	Advanced Operating Systems
CSC 5202	Advanced Computer Architecture
SEC 5xxx	Elective-I (from SE Stream)

Second Year

Third Semester

CSC/SEC 5xxx	Thesis/Independent Research Study I OR Course Work (from CS Stream or from SE-Stream)
SEC 5xxx	Elective-II (from SE-Stream)
SEC 5xxx	Elective-III (from SE-Stream)

Fourth Semester

CSC/SEC 5xxx	Thesis/Independent Research Study II OR Course Work (from CS Stream or from SE-Stream)
SEC 5xxx	Elective-IV (from SE-Stream)

FACULTY OF COMPUTING AND ENGINEERING SCIENCES

Master of Science in Computer Science (With Specialization in Networks & Security)

First Year

First Semester

CSC 5105	Research Methodology
CSC 5101	Advanced Algorithms Analysis
CSC 5102	Theory of Computation

Second Semester

CSC 5201	Advanced Operating Systems
CSC 5202	Advanced Computer Architecture
NSC 5xxx	Elective-I (from N&S Stream)

Second Year

Third Semester

CSC/NSC 5xxx	Thesis/Independent Research Study I OR Course Work (from CS Stream or from N&S-Stream)
NSC 5xxx	Elective-II (from N&S-Stream)
NSC 5xxx	Elective-III (from N&S-Stream)

Fourth Semester

CSC/NSC 5xxx	Thesis/Independent Research Study II OR Course Work (from CS Stream or from N&S-Stream
NSC 5xxx	Elective-IV (from N&S-Stream)

CS-Stream

CSC 5164	Real-Time Systems
CSC 5162	Digital Image Processing
CSC 5161	Machine Learning
CSC 5163	Data Mining
CSC 5166	Operation Research
CSC 5167	Deep Learning
CSC 5264	Expert Systems
CSC 5267	Reverse Engineering
CSC 5266	Digital Forensics and Malware Analysis
CSC 5263	Advanced Resource Sharing Architecture
CSC 5262	Computer Vision
CSC 5268	Robotics
CSC 5261	Advanced Database Design
CSC 5265	Distributed Computing
CSC 5269	Systems and Network Programming
CSC 5168	Big Data Analytics
CSC 5271	Natural Language Processing

SE-Stream

SEC 5163	Software Requirement Engineering
SEC 5161	Software System Architecture
SEC 5164	Software System Quality
SEC 5162	Advanced Software Engineering
SEC 5261	Software Analysis and Testing
SEC 5263	Web Engineering
SEC 5262	Software Project Management

N&S-Stream

NSC 5161	Advanced Computer Networks
NSC 5163	Network Security
NSC 5164	Applied Cryptography
NSC 5162	Information Security
NSC 5165	Cyber Security
NSC 5261	Wireless Sensor Networks
NSC 5264	Telecom Policies and Regulations
NSC 5263	Mobile Ad-hoc Networks
NSC 5262	Advanced Data Communications
NSC 5265	Advanced Routing and Switching
NSC 5166	Advanced Ethical Hacking

Pre-Requisites:

- For any advanced course, pre-requisite course must have been taken before.
- For each track, the following courses must have been done prior to admission.

MS (CS) (In Core Computer Science)

Programming Fundamental
Data Structures
Operating Systems
Finite Automata Theory and Formal Languages

MS (CS) with SE-Specialization

Programming Fundamental
Data Structures
Operating Systems
Software Engineering

MS (CS) with N&S-Specialization

Programming Fundamental
Data Structures
Operating Systems
Data Communication and Computer Networks

Full time academic load is three courses. All students are required to register for full load in the first semester.

FACULTY OF COMPUTING AND ENGINEERING SCIENCES

MS Cyber Security

The MS (Cyber Security) program is of 2-years duration offered in the evening. It requires 33 credit hours, including 4 core courses (3 credits) and 5 elective courses (3 credits). To earn MS (Cyber Security) degree, the student has to complete a thesis (2 x 3 Credits). The maximum time limit to complete the MS (Cyber Security) degree is 4 years.

Why Study Cyber security?

The world is adapting innovative IT solutions such as mobile technology, online banking and electronic government services into everyday use. However, with so many e-solutions and such extensive use of the Internet, attention needs to be turned to the security issue. Cyber systems require innovative and secure IT solutions for everyday use. Therefore, the demand for skilled security professionals is arising to protect against cyber-attacks. Offered through the Department of Computer Science, MS (Cyber security) is designed to respond to the fast-growing demand for technical cyber security experts nationally and internationally. It provides the necessary foundations for the design and development of systems that need to be secure. The major focus will be given to the design of secure systems that exhibit confidentiality, integrity, and availability. The program will provide students with core skills in wide aspects of the security of information systems.

Key objectives of the program are as follow:

PEO-1 Recognize and evaluate security requirements and issues in organizations using IT systems.
PEO-2 Assess cyber security risk management policies to protect an organization's critical information and assets adequately.
PEO-3 Measure the performance of security systems within an enterprise-level information system to maintain and update an enterprise-level information security system.
PEO-4 Implement continuous network monitoring and provide real-time security solutions.

First Year

First Semester

CYS 5101 Applied Cryptography
CYS 5103 Network Security
CYS 5102 Information Security

Second Semester

CYS 5201 Digital Forensics
CYS 5xxx Elective-I
CYS 5xxx Elective-II

Second Year

Third Semester

CYS 5xxx Elective-III
CYS 5xxx Elective-IV
CYS 5109 Thesis (Part-1)

Fourth Semester

CYS 5xxx Elective-V
CYS 5209 Thesis (Part-II)

Electives Courses

CYS 5234 Network Penetration Testing and Countermeasures
CYS 5237 Security in Mobile and Wireless Networks
CYS 5332 Ethical Hacking
CYS 5334 Malware Detection and Analysis
CYS 5232 Blockchain and Crypto Assets
CYS 5333 Intrusion Detection and Firewalls
CYS 5235 Reverse Engineering and Malware Analysis
CYS 5335 Security and Privacy for the Smart Grid
CYS 5233 Machine Learning for Cyber Security
CYS 5337 Security Modelling and Analysis of Mobile Agent Systems
CYS 5236 Security in Ad Hoc Sensor Networks
CYS 5336 Security in Cloud Environment
CYS 5231 Advanced Topic in Cyber Security - I
CYS 5331 Advanced Topic in Cyber Security - II

FACULTY OF COMPUTING AND ENGINEERING SCIENCES

PhD (Computing)

The PhD program requires students to complete 48 credit hours. Course work of 18 credits (6 courses) is needed which include core courses, electives and Independent Research Study. Dissertation of 30 credits is also required to complete. The maximum time limit to complete the PhD degree is 8 years.

First Year

Fall Semester
CSC 6101 Research Methodology*
CSC 6xxx Elective-I
CSC 6xxx Elective-II

Spring Semester
CSC 6xxx Independent Research Study
CSC 6xxx Elective-III
CSC 6xxx Elective-IV

Second Year

Fall Semester
CSC 6xxx Dissertation

Spring Semester
CSC 6xxx Dissertation

Third Year

Fall Semester
CSC 6xxx Dissertation

Spring Semester
CSC 6xxx Dissertation

Elective courses are listed under different streams in MS Computer Science, MS Data Science and MS Cyber Security program.

Followed by successfull completion of the course-work, Comprehensive Examination is required to pass in order to acquire PhD Candidacy after which research period starts. The entire research work is carried out under the supervision of the PhD supervisor who is assigned and approved as per the university procedure. The complete research work is required to be submitted in the form of a "Dissertation" after a minimum period of two years.

PhD course-work credits may be implemented via selection of a particular mode of course execution (as recommended by the BASR).

*The course of Research Methodology is compulsory if not done in Masters.

FACULTY OF COMPUTING AND ENGINEERING SCIENCES

FACULTY OF COMPUTING AND ENGINEERING SCIENCES

DEPARTMENT OF ROBOTICS AND ARTIFICIAL INTELLIGENCE

The Department of Robotics and Artificial Intelligence at SZABIST is committed to provide world-class, hi-tech, scientific, and technological expertise in the field of Artificial Intelligence, Robotics, and Data Science. Globally, the hybridization of these fields has rendered robust, intelligent, autonomous, and real-time systems for modern applications. Moroever, the Department of Robotics and Artificial Intelligence at SZABIST is aimed to produce quality graduates. The students are encouraged to render cutting-edge research & development in the domain of Robotics and Artificial Intelligence to handle socio-economic challenges.

PROGRAMS

The Department of Robotics and Artificial Intelligence at SZABIST offers degree programs both at the undergraduate and graduate levels. All programs being offered in the Department of Robotics and Artificial Intelligence are fully in-line with the guidance of the Higher Education Commission(HEC) and in accordance with the national and global industrial needs. The Department of Robotics and Artificial Intelligence offers the following degree programs:

- BS Artificial Intelligence
- MS Data Science

FACULTY OF COMPUTING AND ENGINEERING SCIENCES

BS ARTIFICIAL INTELLIGENCE

BSAI program is offered by the Department of Robotics and Artificial Intelligence. The BSAI is a 4 year program and consists of 41 courses with a total of 130 credit hours. The Internship opportunities are provided to complete degree requirement. BSAI is a full time day program that covers the emerging dimensions of Machine Learning, Deep Learning, Explainable AI, Evolutionary Computing, Computer Vision, Software Engineering, Natural Language Processing etc. The program comprises of 39 credit hours of Core Computing course, 18 credit hours of Computer Science Core courses, 19 credit hours of General Education courses, 18 credit hours of Artificial Intelligence Core courses, and 36 credit hours of Elective courses. The Maximum duration of the program is six years

Mission Statements

To provide a quality education in Artificial Intelligence in order to produce scientifically, technologically, and professionally competent graduates who are adept to perform a significant role in the continuing transformation of local and global society.

Program Educational Objectives

Following are the Program Educational Objective (PEO)

PEO 1: To equip students with the necessary skills and knowledge to solve complex problems in real-world settings.
PEO 2: To produce graduates practicing in the area of Artificial Intelligence in a socially and ethically responsible way.
PEO 3: To prepare students for lifelong learning skills in Artificial Intelligence and allied disciplines.

Program Learning Outcomes

To attain the educational objectives of programs, it is intended to produce the following measurable outcomes at the time of graduation. Graduates of the program will have:

a. Ability to apply knowledge of mathematics, science, computing fundamentals and any of its specializations to solve complex problems.
b. Ability to identify, formulate, research literature, and analyze complex problems reaching substantiated conclusions using basic principles of mathematics, natural sciences and computer science.
c. Ability to design solutions for complex problems and design software systems, components or processes that meet specified needs with appropriate consideration for public health and safety, cultural, societal, and environmental considerations.
d. Ability to investigate methodically complex problems including literature survey, design and conduct of experiments, analysis and interpretation of experimental data, and synthesis of information to derive valid conclusions.
e. Ability to create, select and apply appropriate techniques, resources, and modern IT tools, including prediction and modeling, to complex activities, with an understanding of the limitations.
f. Ability to understand the impact of professional solutions in societal and environmental contexts and apply reasoning informed by contextual knowledge to assess societal, health, safety, legal and cultural issues.
g. Ability to apply ethical principles and commit to professional ethics and responsibilities and norms of society and professional practice.
h. Ability to work effectively, as an individual or in a team, on multifaceted and/or multidisciplinary settings.
i. Ability to communicate effectively, orally as well as in writing, on complex activities with the community and with the society at large, such as being able to write effective reports and design documentation, make effective presentations, and give and receive clear instructions.
j. Ability to demonstrate management skills and apply systems development principles to one's own work, as a member and/or leader in a team, to manage projects in a multidisciplinary environment.
k. Ability to recognize importance of, and pursue lifelong learning in the broader context of innovation and technological developments.

FACULTY OF COMPUTING AND ENGINEERING SCIENCES

BS (ARTIFICIAL INTELLIGENCE) COURSE PLAN (ROADMAP)

Sem.	Codes	Course Title	Cr.Hrs.		Pre-Req.
First Year					
		Semester -1st			
	CSC 1108	Introduction to Computer Science	2, 0	2	-
	CSCL 1108	Lab : Introduction to Computer Science	0, 1	1	-
	CSC 1103	Fundamentals of Programming	3, 0	3	-
	CSCL 1103	Lab : Fundamentals of Programming	0, 1	1	-
	CSC 1209	Islamic Studies / Humanities	2, 0	2	-
	CSC 1109	Pakistan Studies	2, 0	2	-
	CSC 1101	Calculus and Analytical Geometry	3, 0	3	-
	CSC 1102	English Composition and Comprehension	3, 0	3	-
		Sub-total		**17**	
		Semester -2nd			
	CSC 1208	Object Oriented Programming Techniques	3, 0	3	CSC 1103
	CSCL 1208	Lab: Object Oriented Programming Techniques	0, 1	1	-
	CSC 2103	Digital Logic Design	3, 0	3	-
	CSCL 2103	Lab: Digital Logic Design	0, 1	1	-
	CSC 2206	Linear Algebra	3, 0	3	CSC 1101
	CSC 1206	Probability and Statistics	3, 0	3	-
	CSC 2101	Communication and Presentation Skills	3, 0	3	CSC 1102
		Sub-total		**17**	
Second Year					
		Semester -3rd			
	CSC 2102	Data Structures and Algorithms	3, 0	3	CSC 1103
	CSCL 2102	Lab: Data Structures and Algorithms	0, 1	1	-
	CSC 2201	Computer Organization and Assembly Language	3, 0	3	CSC 2103
	CSCL 2201	Lab: Computer Organization and Assembly Language	0, 1	1	-
	CSC 1201	Discrete Mathematical Structures	3, 0	3	-
	CSC 4101	Artificial Intelligence	3, 0	3	CSC 1208
	CSCL 4101	Lab: Artificial Intelligence	0, 1	1	-
	CSC 2122	Differential Equations	3, 0	3	CSC 1101
	Sub-total			**18**	

Sem.	Codes	Course Title	Cr.Hrs.		Pre-Req.
		Semester -4th			
	CSC 3205	Computer Networks and Data Communications	3, 0	3	-
	CSCL 3205	Lab: Computer Networks and Data Communications	0, 1	1	-
	CSC 2203	Database Systems	3, 0	3	-
	CSCL 2203	Lab: Database Systems	0, 1	1	-
	CSC 3202	Design and Analysis of Algorithms	3, 0	3	CSC 2102
	AIC 2401	Programming for Artificial Intelligence	2,0	2	AIC 4101
	AICL 2401	Lab: Programming for Artificial Intelligence	0, 1	1	-
	AIC xxxx	AI Elective - 1	3, 0	3	-
		Sub-total		**17**	

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Third Year					
Semester -5th					
	CSC 2205	Operating Systems	3, 0	3	CSC 2102
	CSCL 2205	Lab: Operating Systems	0, 1	1	-
	AIC 3501	Artificial Neural Networks	2, 0	2	AIC xxx1
	AICL 3501	Lab: Artificial Neural Networks	0, 1	1	-
	AIC 3503	Machine Learning	2, 0	2	AIC xxx1
	AICL 3503	Lab: Machine Learning	0, 1	1	-
	AIC 3502	Knowledge Representation and Reasoning	3, 0	3	AIC xxx1
	CSC xxxx	University Elective – 1	3, 0	3	-
		Sub-total		**16**	
Semester -6th					
	AIC 3601	Technical and Business Writing	3,0	3	CSC 2101
	AIC 3602	Computing Vision	2, 0	2	AIC xxx2
	AICL 3602	Lab: Computing Vision	0, 1	1	-
	AIC 3603	Natural Language Processing	3, 0	3	AICxxx2
	CSC 3109	Software Engineering	3, 0	3	-
	AIC xxxx	AI Elective - 2	2,0	3	-
	AIC xxxx	University Elective - 2	3, 0	3	-
		Sub-total		**18**	
Fourth Year					
Semester -7th					
	CSC 4106	Parallel and Distributed Computing	3, 0	3	CSC 1208, CSC 2205
	CSC 4102	Professional Practices	3, 0	3	-
	AIC xxxx	University Elective-3	3, 0	3	-
	AIC xxxx	AI Elective - 3	3, 0	3	
	AIC 4707	Final Year Project-I	0, 3	3	-
		Sub-total		**15**	
Semester -8th					
	AIC 4807	Final Year Project-II	0, 3	3	AIC 4105
	AIC 4xxx	University Elective – 4	3, 0	3	-
	AIC 4801	Information Security	3, 0	3	-
	AIC xxxx	AI Elective - 4	3, 0	3	-
		Sub-total		**12**	

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AI ELECTIVES

AIC 4701 Advanced Statistics
AIC 4706 Theory of Automata and Formal Languages
AIC 4802 Data Mining
AIC 4702 Deep Learning
AIC 4805 Speech Processing
AIC 4804 Reinforcements Learning
AIC 4803 Fuzzy Systems
AIC 4703 Evolutionary Computing
AIC 4705 Swarm Intelligence
AIC 4801 Agent Based Modeling
AIC 4704 Knowledge Based Systems

UNIVERSITY ELECTIVES

The Electives courses offered are as follows:

AIC 4504 Organizational Behavior
AIC 4605 Research Report
AIC 4603 Management Principles
AIC 4601 Business and Technology Ethics
AIC 4503 Introduction to Accounting
AIC 4602 Foreign Languages
AIC 4502 History of Scientific Ideas
AIC 4501 Design and Creativity
AIC 4505 Sociology
AIC 4604 Psychology

COURSES

Coverage of relevant pre-requisite will be ensured while allowing any of the following courses from this category:

1. Calculus and Analytic Geometry
2. Linear Algebra
3. Probability and Statistics
4. Differential Equations

DISTRIBUTION OF CREDIT HOURS

I. Core Courses:

i. Computing Core Courses	39
ii. Computer Science Core Courses	18
iii. General Education Courses	19
iv. Artificial Intelligence Core Courses	18

II. Elective Courses:

i. Mathematics & Science Foundation Courses	12
ii. Artificial Intelligence Elective Courses	12
iii. Institutional Elective Courses	12
Total	**130**

Internship

The internship is scheduled for summer at the end of third year. After completion of the six-week internship, all students are required to submit a comprehensive report giving details of their experience and learning.

FACULTY OF COMPUTING AND ENGINEERING SCIENCES

Master of Science in Data Science

The MSDS program is offered by Department of Robotics and Artificial Intelligence. It is a two-year evening program that requires 30 credit hours to be completed. The program comprises of 03 core courses, 02 specialization courses in data science, and 03 Elective courses. In-addition, the student has an option to complete the MSDS through course work OR with research work. If the student opts for coursework stream, he/she is required to compete additional 02 courses of 03 Credit hours each. Alternatively, if the student opts to complete MSDS by research work than he/she must opt 02 Independent Research Study (IRS), 06 credit hours OR a research Thesis, 06 credit hours. The maximum time limit to complete the MSDS degree is 4 years.

Why Study Data Science?

In the recent era the gigantic ascent in the volume of data has been witnessed, globally. It includes, but not limited to, Banking, Finance, Education, Government. This has created a pressing need to devise the robust methods for data management and inferencing. The need has been well-handled with the emergence of Data Science. The scope of data science is multi-folded, such as data mining, knowledge extraction and representation, data management, data analytics, intelligent and optimal solution extraction etc. The MSDS degree program will covers the emerging dimensions and need of data science.

Program Objectives

The MSDS program is designed to aimed the following program objectives:

PEO 1: To equip students to transform data into actionable insights to make complex business decisions.
PEO 2: To enable students, understand and analyze a problem and arrive at computable solutions.
PEO 3: To expose students to the set of technologies that match those solutions.
PEO 4: To gain hands-on experience on data-centric tools for statistical analysis, visualization and big data applications at the same rigorous scale as in a practical data science project.
PEO 5: To understand the implications of handling data in terms of data security and business ethics

First Year

First Semester

DSC 5101 Statistical and Mathematical Methods for Data Science
DSC 5102 Tools and Techniques in Data Science
DSC xxxx Elective-I

Second Semester

DSC 5201 Machine Learning
DSC xxxx Specialization-Elective-I
DSC xxxx Specialization-Elective-II

Second Year

Third Semester

DSC xxxx Thesis (Part-I) or Elective-IV or Independent Research Study (Part-l)
DSC xxxx Elective-II

Fourth Semester

DSC xxxx Elective-III
DSC xxxx Thesis (Part-II) or Elective-V or Independent Research Study (Part-ll)

Course Types	Cumulative Credits
Core courses (3)	9
Specialization Requirement Courses (2)	6
Electives (3)	9
Thesis (Part-I & Part-II) or Elective (II & V) or Independent Research Study (I & II)	6
Total	**30**

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Three Core Courses	Cr.Hrs
Statistical and Mathematical Methods for Data Science	3
Tools and Techniques in Data Science	2 + 1*
Machine Learning	3

* 2+1 means 2 hours of lecture + 3 hours of lab work

Specialization Courses	Cr.Hrs
DSC 5242 Big Data Analytics	3
DSC 5223 Deep Learning	3
DSC 5241 Natural Language Processing	3
DSC xxxx Distributed Data Processing	3

Deficiency Courses
DSC xxxx Programming Fundamentals (Core Programming Course)
DSC xxxx Data Structures & Algorithms OR Design & Analysis of Algorithms
DSC xxxx Database Systems

Elective Courses

DSC 5221 Advanced Computer Vision
DSC 5125 Algorithmic Trading

DSC 5224 Bayesian Data Analysis
DSC 5126 Bioinformatics

DSC 5121 Cloud Computing
DSC 5225 Computational Genomics
DSC 5122 Data Visualization
DSC 5226 Deep Reinforcement Learning
DSC 5127 Distributed Data Processing and Machine Learning
DSC 5227 Distributed Machine Learning in Apache Spark
DSC 5228 High-performance computing
DSC 5128 Inference and Representation
DSC 5129 Optimization Methods for Data Science and Machine Learning
DSC 5229 Probabilistic Graphical Models
DSC 5231 Scientific Computing in Finance
DSC 5131 Social network analysis
DSC 5132 Time-series Analysis and Prediction

All courses may not be offered in every semester.

Elective courses may vary from time to time.

Alternative courses may be substituted as and when required.

FACULTY OF COMPUTING AND ENGINEERING SCIENCES

DEPARTMENT OF MECHATRONIC ENGINEERING

MECHATRONIC ENGINEERING

Mechatronics is a multidisciplinary field of engineering. It refers to an efficient and effective integration of mechanical systems and electronics. A mechatronic engineer unites the principles of mechanics, electronics and computing to generate a simpler, economical, reliable, and versatile system. Examples of mechatronic systems include aircraft, motor vehicles, automated manufacturing plants, robots of all types, medical and surgical devices and many others.

MECHATRONICS AT SZABIST

The department offers a program that includes various engineering science courses from the relevant fields in addition to a strong foundation in basic sciences and mathematics. In order to ensure that this academic program at SZABIST conforms to standards of internationally recognized universities, the curriculum has been designed with the guidance of academics and professionals specializing in Mechatronics. The program has been accredited by Pakistan Engineering Council. The program has received 7 stars (Highest Ranking) by the Chartered of Inspection & Evaluation Committee, Sindh.

BE-Mechatronics Engineering degree program which is accreditated Under Level-II (i.e. OBE- Outcome Based Education) by Pakistan Engineering Council.

FACULTY OF COMPUTING AND ENGINEERING SCIENCES

BE Mechatronic Engineering

Program Objectives

The objective of the program is to provide a broad and basic education in multiple disciplines comprised of Mechanical, Electronics, and Computer Engineering to ensure that students in the program are exposed to a wide spectrum of engineering knowledge and practice. Upon completion of their degree, the Bachelor of Engineering (Mechatronics) graduates will:

- Be competent mechatronic engineers who are knowledgeable, skillful and able to solve emerging problems within their organization and society at large.
- Have inclination towards research and lifelong learning and be able to promote entrepreneurial ideas.
- Be effective engineers with leadership qualities and high morals & professional ethics.

Program Learning Outcomes:

- Engineering Knowledge
- Problem Analysis
- Design/Development of Solutions
- Investigation
- Modern Tool Usage
- The Engineer and Society
- Environment and Sustainability
- Ethics
- Individual and Team work
- Communication
- Project Management
- Life-Long Learning

For details please visit the below link:
http://khi.szabist.edu.pk/be-mechatronics.html

First Year

Fall Semester

ME 1101	Communication and Presentation Skills (2, 0)
ME 1111	Electric Circuits (2, 1)
ME 1104	Engineering Mathematics-I: Calculus and Analytical Geometry (3, 0)
ME 1106	Islamic Studies (2, 0)
ME 1109	Engineering Drawing-I (0, 2)
ME 1203	Engineering Physics (2, 1)
ME 1207	Engineering Workshop (0, 2)

Spring Semester

ME 1201	Electronic Devices and Circuits (3, 1)
ME 1202	Engineering Mathematics-II: Linear Algebra and ODEs (3, 0)
ME 1204	Engineering Statics (3, 0)
ME 1209	Computer Programming (0, 2)
ME 2306	Pakistan Studies (2, 0)
ME 2xxx	Social Sciences Elective (2, 0)
ME 2xxx	Materials and Manufacturing Processes (2, 0)

Second Year

Fall Semester

ME 2302	Digital Logic Design (2, 1)
ME 2303	Engineering Dynamics (3, 0)
ME 2304	Engineering Mathematics–III: 3D Geometry and Vector Calculus (3, 0)
ME 2311	Network Analysis (2, 0)
ME 2312	Data Structures and Object Oriented Programming (0, 2)
ME 2309	Engineering Drawing-II (0, 1)
ME 2405	Thermodynamics (2, 1)

Spring Semester

ME 2401	Electronics Circuit Design (3, 1)
ME 2403	Engineering Mathematics-IV: Transformation Techniques (3, 0)
ME 2409	Strength of Materials (2, 1)
ME 2407	Actuating Systems (3, 1)
ME 2408	Signals and Systems (2, 0)
ME 3607	Solid Modeling (0, 1)

FACULTY OF COMPUTING AND ENGINEERING SCIENCES

Third Year

Fall Semester

ME 3501 Engineering Mathematics–V: Numerical Methods (3, 0)
ME 3502 Fluid Mechanics (3, 1)
ME 3509 Microprocessor and Microcontroller Based Systems (2, 1)
ME 3507 Theory of Machines (2, 1)
ME 3508 Instrumentation and Measurements (3, 1)

Spring Semester

ME 3602 Control Systems (3, 1)
ME 3603 Engineering Mathematics–VI: Probability and Statistics (3, 0)
ME 3604 Machine Design (3, 0)
ME 3605 Power Electronics (3, 1)
ME 4705 Mechatronics System Design (3, 1)

Fourth Year

Fall Semester

ME 4xxx Engineering Elective-I (3, 0)
ME 4702 Engineering Economics and Project Management (3, 0)
ME 4706 Professional Practices (2, 0)
ME 4708 Final Year Project-I* (0, 3)
ME 4703 Heat Transfer (2, 1)
ME 4802 Robotics (3, 1)
ME 1205 Technical Writing Skills (2, 0)
ME 4711 Finite Element Analysis (0, 1)

Spring Semester

ME 4703 Heat Transfer (2, 1)
ME 4xxx Engineering Elective-II (3, 0)
ME 4xxx Management Sciences Elective (3, 0)
ME 4808 Final Year Project-II (0, 3)
ME 4807 Manufacturing Automation (2, 1)
ME 3608 Technoprenuership (2,0)

*To be continued and graded at the conclusion of 8th Semester.

Electives

Engineering Electives

ME 4722 Digital Signal Processing
ME 4828 Modeling and Simulation
ME 4821 Digital Image Processing
ME 4727 Digital Control Systems
ME 4826 Embedded Systems
ME 4721 Artificial Intelligence and Computer Vision
ME 4827 Applied Thermodynamics
ME 4729 Mechanical Vibrations
ME 4xxx Sensors and Sensing Technologies
ME 4xxx Machine Learning

Management Sciences Electives

ME 4823 Engineering Management
ME 4724 Entrepreneurship
ME 4728 Total Quality Management
ME 4725 Leadership and Motivation Techniques
ME 4xxx Supply Chain Management

Social Sciences Electives

ME 2352 Organizational Behavior
ME 2353 Psychology
ME 2354 Sociology
ME 2351 Foreign Languages
Or any other relevant course

Elective courses are offered subject to the availability of the required expertise & resources.

Full-time academic load during first semester is six courses. All students are required to register for full load in the first semester.

Community Service Learning Course

A non-credited community service learning course (1,1) will be offered during the degree program. This course aims to impart general awareness and knowledge along with social guidance to develop students into socially active citizens.

Internship

The internship is scheduled for summer at the end of the third year. After the completion of the 6-week internship, all students are required to submit a comprehensive report giving details of their experience and learning.

FACULTY OF COMPUTING AND ENGINEERING SCIENCES

MS Mechatronic Engineering

Program Objectives

The broad objectives of the Masters program in Mechatronic Engineering are to instill in its students a solid foundation of mathematical, scientific and engineering knowledge in addition to developing the intellectual skills essential for prosperity and success in their careers. The program is structured in such a manner that the students are provided a firm theoretical foundation with opportunity to strengthen their knowledge through research assignments, practical training and projects. The objectives of Masters in Mechatronics Engineering program are to:

- Enable students to pursue a rigorous post-doctorate/research program in Mechatronics Engineering.
- Improve the marketability of our students in the local industry, public sector and R&D Organizations.
- Provide technical confidence and financial guidance needed to start a small-scale industry to graduates interested in self-employment.

Roadmap

First Year

Fall Semester

ME 5102 Advanced Robotics (3, 0)
ME 5101 Advanced Embedded Systems (3, 0)
ME 5105 Research Methodology (3, 0)

Spring Semester

ME 5202 Image Processing for Intelligent Systems (3, 0)
ME 5201 Data Acquisition and Control (3, 0)
ME 5xxx Elective-I (3, 0)

Second Year

Fall Semester

ME 5xxx Elective-II (3, 0)
ME 5xxx Elective-III (3, 0)

Spring Semester

(If students opt for research work based degree)

ME 5xxx Thesis (0, 6)

(If students opt for coursework based degree)

ME 5xxx Elective-IV (3, 0)
ME 5xxx Elective-V (3, 0)

Electives

Robotics and Industrial Automation

ME 5225 Mobile Robotics
ME 5222 Cognitive Robotics
ME 5324 Machine Vision
ME 5321 Advanced Manufacturing Design Techniques
ME 5221 Adaptive Control
ME 5326 Precision Manufacturing Systems
ME 5325 Optimization of Engineering Systems
ME 5322 Computer Integrated Manufacturing
ME 5224 Micro-Manufacturing Systems and Technology
ME 5226 Rapid Prototyping, Tooling and Automation
ME 5228 Linear Control Systems
ME 5323 Industrial Control Technology

Smart Electromechanical Systems

ME 5329 Micro-Electro Mechanical Systems
ME 5227 Advanced Modeling and Simulation
ME 5331 Programming of Embedded Systems
ME 5228 Linear Control Systems
ME 5327 Artificial Intelligence
ME 5332 Sensor and Sensing Technology
ME 5229 Optomechatronic Systems
ME 5232 Smart Materials and Structures
ME 5231 Pattern Recognition and Analysis
ME 5328 Digital Integrated Circuit Design

All courses may not be necessarily being offered every year. Alternate courses may be substituted as and when needed.

FACULTY OF EDUCATION & SOCIAL SCIENCES

Department of Social Sciences at SZABIST aims to develop both intellectual and practical skill sets for our well-rounded students so that they shall face challenges of the 21st century and translate them into opportunities while keeping in mind social, economic and sustainable requirements of the region and beyond.

FACULTY OF EDUCATION & SOCIAL SCIENCES

Department of Social Sciences

BS Social Sciences

To obtain a BS degree in Social Sciences, students are required to complete a total of 142 credit hours within 6 years. The degree consists of a total of 46 courses and a Research Project.

First Year

Fall Semester

SS 1117	Computer and Web Skills
SS 1116	English for General Purposes
SS 1105	Microeconomics
SS 1115	Community Services
SS 1201	Introduction to Social Sciences
SS 1112	Pakistan Studies

Spring Semestert

SS 2306	Psychology
SS 1205	Macroeconomics
SS 2307	Sociology
SS 1155	Introduction to Political Science
SS 2412	International Relations
SS 1212	Islamic Studies OR
SS 1213	Humanities* (For non-Muslim students)

Second Year

Fall Semester

SS 2314	Study of Anthropology
SS 2316	English for Academic Purposes
SS 2313	Introduction to Social Psychology
SS 2318	Mathematics and Statistics
SS 2413	Philosophy
SS 2319	Introduction to Indus Civilization

Spring Semester

SS 2406	Gender Studies
SS 2418	Statistical Inferences
SS 2414	Introduction to Organizational Psychology
SS 3503	Development Studies
SS 1209	Social Policy
SS 1xxx	Elective

Third Year

Fall Semester

SS 2312	Culture, Art and Society
SS 3512	Foreign Language-I
SS 3606	Political Economy
SS 4xxx	Major-I
SS 4xxx	Major-II
SS 4xxx	Major-III

Spring Semester

SS 3504	Research Methods
SS 3605	International Law and Human Rights
SS 3612	Foreign Language-II
SS 4xxx	Major-IV
SS 4xxx	Major-V
SS 4xxx	Major-VI

Fourth Year

Fall Semester

SS 2411	Environmental Studies
SS 4707	Introduction to Health Psychology
SS 4709	Research Project-I
SS 4xxx	Major-VII
SS 4xxx	Major-VIII
SS 4xxx	Major-IX

Spring Semester

SS 4804	Public Policy
SS 4809	Research Project-II
SS 2405	Enlightenment
SS 4xxx	Major-X
SS 4xxx	Major-XI
SS 4xxx	Major-XII

ELECTIVES

SS 1154	Literature
SS 1165	Human Geography
SS 1157	Comparative Religion
SS 1254	World History
SS 1262	Mass Media
SS 1163	Development and Politics
SS 1263	Culture and Media in Sindh
SS 1164	History of Ideas
SS 4075	Sindh Studies
SS 1264	Introduction to Philanthropy

MAJORS

Psychology

SS 4111	Abnormal Psychology
SS 4112	Developmental Psychology
SS 4134	Cognitive Psychology
SS 4135	Educational Psychology
SS 4234	Psychodynamics
SS 4268	History of Psychology
SS 4167	Child Psychology

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SS 4156	Clinical Psychology
SS 4114	Personality Theories
SS 4255	Counseling and Psychotherapy
SS 4211	Psychological Testing
SS 4236	Positive Psychology
SS 4168	Experimental Psychology
SS 4267	Forensic Psychology
SS 4262	Physiological Psychology
SS 4113	Environmental Psychology
SS 4297	Community Psychology
SS xxxx	Family and Relationship Counseling
SS xxxx	Addiction Counseling

Sociology

SS 4269	Civil Society
SS 4271	Peace Movements
SS 4138	Corporate Social Responsibility
SS 4141	Mass, Media and Society
SS 4237	Post-Colonial State and Social Development
SS 4238	Social Entrepreneurship
SS 4239	Social Justice
SS 4241	Sociology of Education
SS 4242	The Sociology of Poverty
SS 4196	Social Theories-I
SS 4296	Social Theories-II
SS 4171	Class, Caste, and Ethnicity in South Asia
SS 4172	Political Sociology
SS 4272	Social Change in Pakistan
SS 4169	Citizenship
SS 4273	Urbanization
SS 4295	Criminology
SS 4197	The Sociology of Religion
SS 4198	Sociology of Health
SS xxxx	Media and Violence
SS xxxx	Project Development and Management

International Relations

SS 4275	Foreign Policy and International Politics
SS 4274	Diplomacy, Conflict Resolution and Confidence Building Measures
SS 4219	Peace Research
SS 4222	Strategic Studies
SS 4176	Globalization and Global Governance
SS 4277	Modern Ideologies
SS 4174	Central and West Asian Studies
SS 4175	European Studies
SS 4177	Middle Eastern Studies
SS 4179	Politics of Terrorism
SS 4178	Muslim World
SS 4276	International Institutions
SS 4278	Political Geography
SS 4119	Arms Control and Disarmament
SS 4279	US and International Politics

Sindh Studies

SS 4188	Geography and Geology of Sindh
SS 4287	History and Politics of Sindh
SS 4288	Irrigation System of Sindh
SS 4185	Agriculture in Sindh
SS 4285	Archaeology of Sindh
SS 4186	Anthropology and Culture of Sindh
SS 4286	Art and Architecture in Sindh
SS 4187	Ethnomusicology of Sindh
SS 4289	Sindh's Economy and Commerce
SS 4292	Survey of Sindhi Literature
SS 4189	Philosophy of Sindh
SS 4192	Sindh's Sociology-I: Education and Language Policy
SS 4193	Sindh's Sociology-II: Social Structures and Development
SS 4194	Sindh's Sociology-III: Health, Gender, and Feminism
SS 4293	The Sindhi Diaspora
SS 4291	Sindh's Geopolitical Exigencies
SS 4191	Sindh's Botanical and Zoological Heritage

Economics

SS 4139	Gender and Development
SS 4147	Development and Planning
SS 4181	Capabilities and Human Development
SS 4281	Fiscal and Monetary Economics
SS 4261	Mathematical Economics
SS 4183	Industrial Economics
SS 4284	Trade Economics
SS 4128	Agriculture Economics
SS 4182	Game Theory
SS 4283	Labour Economics
SS 4282	Economics Growth
SS 4184	Poverty and Inequality
SS 4228	History of Economic Thoughts
SS 4249	Pakistan Economy
SS 4251	Sustainable Development
SS 4155	Basic Econometrics
SS xxxx	Managerial Economics

All courses may not necessarily be offered in every year. Alternate courses may be substituted as and when required.

Full time academic load is six courses. All students are required to register for full load in the first semester.

Internship

The internship is scheduled for summer at the end of the third year. After the completion of the 6-week internship, all students are required to submit a comprehensive report giving details of their

FACULTY OF EDUCATION & SOCIAL SCIENCES

MS SS (International Relations, Economics, Psychology and Sociology)

There are two streams available for MS SS. One Stream is Course Work Based Stream and other one is Research based Stream. In Course Work Stream, the student is required to complete 10 courses of 3 credit hours each. In the Research Based Stream, the student is required to complete 8 Courses (24 credit hours) and Two IRS (6 credit hours) One Thesis (6 credit hours). In both the streams, 30 credit hours to be completed. The time limit to earn an MS degree is from 1.5 to 4 years. The detail of two streams is as follows:

1- MS (Course Based Stream)

The scheme of study is as follows:

- 02 core courses (6 Credit Hours)
- 08 Electives (24 Credit Hours)
- No IRS or Thesis

First Year

Fall Semester

SS 5121 Advanced Research Methods and Techniques-I (Qualitative)
SS 5122 Advanced Research Methods and Techniques-II (Quantitative)
SS 5xxx Elective-I*
SS 5xxx Elective-II

Spring Semester**

SS 5xxx Elective-III
SS 5xxx Elective-IV
SS 5xxx Elective-V
SS 5xxx Elective-VI

Second Year

Fall Semester**

SS 5xxx Elective-VII
SS 5xxx Elective-VIII

**(Offering may fluctuate as per university policy)

* Electives (Electives in any of the following specializations)

- International Relations
- Economics
- Psychology
- Sociology

2- MS (Research Based Stream)

The scheme of study is as follows:

- 02 core courses (6 Credit Hours)
- 06 Electives (18 Credit Hours)
- 02 IRSs or Thesis (6 Credit Hours)

First Year

Fall Semester

SS 5121 Advanced Research Methods and Techniques-I (Qualitative)
SS 5122 Advanced Research Methods and Techniques-II (Quantitative)
SS 5xxx Elective-I*
SS 5xxx Elective-II

Spring Semester**

SS 5xxx Elective-III
SS 5xxx Elective-IV
SS 5xxx Elective-V
SS 5xxx Elective-VI

Second Year

Fall Semester**

SS 5xxx Independent Research Study (I & II) OR
SS 5xxx Thesis (Part I)

Spring Semester

SS 5xxx Thesis (Part II)

**(Offering may fluctuate as per university policy)

* Electives (Electives in any of the following specializations)

- International Relations
- Economics
- Psychology
- Sociology

FACULTY OF EDUCATION & SOCIAL SCIENCES

ELECTIVES

MS (International Relations)

SS 5431 Dynamics of Security
SS 5439 Globalization in the 21st Century: Challenges and Opportunities
SS 5436 Role of Great Powers and International Relations
SS 5437 Critical Geo-Politics
SS 5104 Politics of Geo-Economics
SS 5111 Democratization as a Global Process
SS 5212 NGO Management
SS 5306 Sacred and Secular
SS 5311 Environmental Studies
SS 5312 Globalization and Developing Countries
SS 5313 Intellectual Property Rights and Laws
SS 5321 History of Ideas
SS 5206 Political Economy in the Global Perspective
SS 5443 Human Rights in International Perspective
SS 5441 Globalization: Issues and Debates
SS 5434 Political Theory
SS 5442 History of Economic Thought in Contemporary Perspective
SS 5438 Foreign Policy of Pakistan
SS 5445 History of International Relations
SS 5446 Theories of International Relations
SS 5334 International Politics of South Asia

MS (Economics)

SS 5234 International Trade
SS 5236 Economic Growth and Development
SS 5238 Monetary Economics
SS 5203 Public Finance
SS 5439 Globalization in the 21st Century: Challenges and Opportunities
SS 5223 Financial Time Series
SS 5305 Political Economy of Pakistan
SS 5214 Public Policy Management
SS 5322 Topics in Political Economy
SS 5327 Development Economics and Sustainability
SS 5312 Globalization and Developing Countries
SS 5321 History of Ideas
SS 5228 Corporate Governance
SS 5231 Advanced Microeconomics
SS 5232 Advanced Macroeconomics
SS 5233 Advanced Econometrics
SS 5442 History of Economic Thought in Contemporary Perspective
SS 5235 Gender Work and Economy
SS 5432 Gender Issues in Rural Development
SS 5237 Advanced Labour Economics

MS (Sociology)

SS 5332 Sociology of Development
SS 5345 Population Dynamics
SS 5348 Social Statistics
SS 5217 Cultural Anthropology
SS 5212 NGO Management
SS 5331 Gender and Human Rights
SS 5402 Law and Human Rights
SS 5336 Community Development and Social Mobilization
SS 5339 Gender Issues in Global Scenario
SS 5333 Sociology of Gender Issues
SS 5352 Women Studies
SS 5306 Sacred and Secular
SS 5351 Sociology of Sexuality
SS 5441 Globalization: Issues and Debates
SS 5215 Global Governance
SS 5349 Sociology of Science, Knowledge and Technology
SS 5342 Industrial Sociology
SS 5341 Immigration in Contemporary Perspectives
SS 5335 Sociology of Migration and Urbanization
SS 5302 Sustainable Development
SS 5334 Social Change and Development
SS 5347 Rethinking Global Development: New Frameworks for Understanding Poverty, Inequality and Growth in 21 Century
SS 5337 Community Organizing and Development
SS 5346 Religion and Development
SS 5344 Population and Development: Current Issues and Future Implications
SS 5338 Contemporary Sociological Thoughts
SS 5343 Leadership in Sociology: Theory and Practice
SS 5353 Foundational Sociological Perspective
SS 5354 Health and Illness: Theory and Practice

MS (Psychology)

SS 5461 Applications of Contemporary Data Analysis Tools
SS 5435 Use, Construction and Interpretation of Tests
SS 5423 School Psychology
SS 5422 Cross-Cultural Psychology
SS 5463 Community Psychology
SS 5465 Environmental Psychology
SS 5433 Gender Psychology
SS 5464 Consumer Behavior
SS 5421 Perspective in Organizational Psychology
SS 5469 Psychological Assessment in Organizational Psychology
SS 5471 Psychology of Leadership
SS 5468 Organizational Culture and Development
SS 5466 Marketing and Consumer Psychology
SS 5467 Organizational Conflict and Management
SS 5328 Assessment and Diagnosis-I
SS 5411 Assessment and Diagnosis-II
SS 5319 Psychotherapy and Counseling-I
SS 5419 Psychotherapy and Counseling-II
SS 5329 Psychophysiology and Psychopharmacology
SS 5462 Clinical Internship

Two interdisciplinary courses can be allowed with approval of the both Program Managers subject to the relevance of courses. Elective courses may vary from time to time.

FACULTY OF EDUCATION & SOCIAL SCIENCES

PhD SS (International Relations, Economics,Sociology and Psychology)

For PhD SS Program, Students are required to complete 48 credit hours. 5 courses of 3 credit hours each and one Independent Research Study of 3 Credit Hours (total 18 Credit hours for Course Work) and One dissertation of 30 credit hours (Total 48 Credit Hours for PhD).

- There are two compulsory courses in PhD i.e. Advanced Research Methods and Techniques (Qualitative) and Advanced Research Methods and Techniques (Quantitative).
- Students cannot register in IRS before completing compulsory courses.
- Candidate may be given prerequisite/deficiency courses or theses which will be decided by the Interview Board at the time of admission.
- Prerequisite Courses are non-credit courses.
- Dissertation of 30 credit hours is Compulsory.
- Registration in Dissertation is allowed after passing Comprehensive Examination, GAT- Subject Test and maintaining minimum CGPA requirement .
- All the requirements of HEC pertaining to PhD must be fulfilled these are:
  - Minimum 60% GAT Subject.
  - CGPA requirement (3.00 GPA/CGPA minimum pass requirement for each course and for CGPA).
  - Passing Comprehensive examination to establish the PhD candidacy (maximum 2 attempts allowed).
  - One Research Paper Published from the thesis in Y-category journal before the completion of 30 credit hours Dissertation.
- Elective Courses to be selected from the specialized area of International Relations, Economics, Psychology and Sociology.
- Maximum Course Load for each Semester is 9 Credit Hours.
- Time duration for PhD is Minimum 3 years and Maximum 8 years.
- All General guidelines mentioned in DOCTORAL DEGREE PROGRAMS are applicable on PhD- Social Sciences.

First Year

Fall Semester

SS 6104 Advanced Research Methods and Techniques-I (Qualitative)
SS 6105 Advanced Research Methods and Techniques-II (Quantitative)
SS 6xxx Elective-I

Spring Semester

SS 6xxx Elective-II
SS 6xxx Elective-III
SS 6218 Independent Research Study

Second Year

Fall Semester

SS 6xxx Dissertation

Spring Semester

SS 6xxx Dissertation

Third Year

Fall Semester

SS 6xxx Dissertation

Spring Semester

SS 6xxx Dissertation

ELECTIVES

PhD (International Relations)

SS 6225 Dynamics of Security
SS 6229 Globalization in the 21st Century: Challenges and Opportunities
SS 6331 Role of Great Powers and International Relations
SS 6223 Critical Geo-Politics
SS 6237 Politics of Geo-Economics
SS 6224 Democratization as a Global Process
SS 6235 NGO Management
SS 6238 Sacred and Secular
SS 6226 Environmental Studies
SS 6228 Globalization and Developing Countries
SS 6234 Intellectual Property Rights and Laws
SS 6227 Foreign Policy of Pakistan
SS 6233 History of Ideas
SS 6222 Political Economy in the Global Perspective
SS 6239 Human Rights in International Perspective
SS 6231 Globalization: Issues and Debates
SS 6236 Political Theory
SS 6232 History of Economic Thought in Contemporary Perspective
SS 6242 History of International Relations
SS 6243 Theories of International Relations
SS 6241 International Politics of South Asia

FACULTY OF EDUCATION & SOCIAL SCIENCES

PhD (Economics)

SS 6324 International Trade
SS 6327 Economic Growth and Development
SS 6332 Monetary Economics
SS 6322 Public Finance
SS 6229 Globalization in the 21st Century: Challenges and Opportunities
SS 6311 Financial Time Series
SS 6237 Politics of Geo-Economics
SS 6333 Political Economy of Pakistan
SS 6334 Public Policy Management
SS 6335 Topics in Political Economy
SS 6222 Political Economy in the Global Perspective
SS 6112 Development Economics and Sustainability
SS 6232 History of Economic Thought in Contemporary Perspective
SS 6228 Globalization and Developing Countries
SS 6233 History of Ideas
SS 6326 Corporate Governance
SS 6325 Advanced Microeconomics
SS 6321 Advanced Macroeconomics
SS 6323 Advanced Econometrics
SS 6329 Gender Work and Economy
SS 6336 Advanced Labour Economics

PhD (Sociology)

SS 6367 Sociology of Development
SS 6363 Population Dynamics
SS 6366 Social Statistics
SS 6315 Cultural Anthropology
SS 6235 NGO Management
SS 6355 Gender and Human Rights
SS 6221 Law and Human Rights
SS 6353 Community Development and Social Mobilization
SS 6356 Gender Issues in Global Scenario
SS 6368 Sociology of Gender Issues
SS 6373 Women Studies
SS 6371 Sociology of Sexuality
SS 6231 Globalization: Issues and Debates
SS 6357 Global Governance
SS 6369 Sociology of Science, Knowledge and Technology
SS 6359 Industrial Sociology
SS 6358 Immigration in Contemporary Perspectives
SS 6352 Sociology of Migration and Urbanization
SS 6372 Sustainable Development
SS 6351 Social Change and Development
SS 6365 Rethinking Global Development: New Frameworks for Understanding Poverty, Inequality and Growth in 21 Century
SS 6354 Community Organizing and Development
SS 6364 Religion and Development
SS 6362 Population and Development: Current Issues and Future Implications
SS 6361 Leadership in Sociology: Theory and Practice
SS 6238 Sacred and Secular

PhD (Psychology)

SS 6343 Applications of Contemporary Data Analysis Tools
SS 6266 Use, Construction and Interpretation of Tests
SS 6342 School Psychology
SS 6341 Cross-Cultural Psychology
SS 6346 Community Psychology
SS 6348 Environmental Psychology
SS 6349 Gender Psychology
SS 6347 Consumer Behavior
SS 6251 Perspective in Organizational Psychology
SS 6252 Psychological Assessment in Organizational Psychology
SS 6253 Psychology of Leadership
SS 6319 Organizational Culture and Development
SS 6317 Marketing and Consumer Psychology
SS 6318 Organizational Conflict and Management
SS 6314 Assessment and Diagnosis-I
SS 6344 Assessment and Diagnosis-II
SS 6254 Psychotherapy and Counseling-I
SS 6255 Psychotherapy and Counseling-II
SS 6316 Psychophysiology and Psychopharmacology
SS 6345 Clinical Internship

Two interdisciplinary courses can be allowed with approval of both Program Managers subject to the relevance of courses. Elective courses may vary from time to time.

FACULTY OF EDUCATION & SOCIAL SCIENCES

DEPARTMENT OF EDUCATION

The Department of Education at SZABIST is committed to improve the quality of education in Pakistan. The institute prepares its students for leadership roles in the field of education to meet the challenges of fast-changing global world without losing sight of the local context. The emphasis is on fostering a critical awareness about educational issues, the socio-politics of educational policies, curricular and pedagogical decisions and teacher education/faculty development problems. This is achieved through interactive teaching, intensive courses and rigorous research-based assignments and practicum.

PROGRAM

The programs being offered at the Department of Education are designed to meet national and international standards of educational study and research. They conform with the HEC guidelines and cater to the interests of a diverse set of learners who have chosen Education to be their field of study. The programs prepare them for practical leadership roles with sound theoretical standing to make informed decisions.

FACULTY OF EDUCATION & SOCIAL SCIENCES

Diploma in Early Childhood Education and Development (ECED)

The diploma in ECED is a holistic early years' education program offered by SZABIST University. This 1-year diploma is a vigorous full-time study program for fresh graduates and young people who aspire to be a part of the qualified education sector in Pakistan. The program will be a year-long diploma spread over 2 semesters with 10 courses and 30 credit hours. With the growing demand of preschools sprouting at various demographically dense areas of Karachi, the supply of qualified teachers does not still yet meet the demand. The incumbent training institutes are serving average quality certificates and diplomas to a vast number of students. If SZABIST launches a high quality ECE program, it will attract many teachers from nearby vicinities if the program is well marketed. This diploma, if offered, will serve the potentially huge ECE sector present in Karachi. This will also be a positive step towards Pakistan's commitment to achieving one of its SDGs which promises an improvement in the quality of early and primary education.

Semester I

xxx xxxx	Foundations of Education in ECE
xxx xxxx	Child Development and Play Experiences
xxx xxxx	Leadership in ECE
xxx xxxx	Classroom Management in ECE

Semester II

xxx xxxx	Observation & Assessment in ECE
xxx xxxx	Critical Thinking in the Early Years
xxx xxxx	Curriculum & Lesson Planning
xxx xxxx	Teaching Practicum in ECE

Semester III

xxx xxxx	Language to Literacy
xxx xxxx	Health, Nutrition & Wellness

Bachelors of Science in Educational Psychology

Program Description

Department of Education at SZABIST offers BS in Educational Psychology as a non- teaching program. This program has been designed to meet the international standards in the field of Educational Psychology which opens multiple doors to facilitate aspired students with diversity and compatibility. The emphasis of the program is not limited to the theoretical aspects but it will abridge practical approach with the educational industry to foster the integration of psychology in education. The outcome of this course would be useful for the graduates to seek master and doctoral programs providing them diversified options in the domains of psychology, education, mental health counselling, school counselling and psychology, and clinical psychology.

Program Mission:

The program will seek to develop a holistic program to produce professionals who can understand, interpret and analyze parameters of educational psychology and apply their knowledge for the betterment of education in society.

First Year

Semester One

BEP 1102	Computer and Web Skills
BEP 1103	English for General Purposes
BEP 1106	Islamiat/Ethics and Pakistan Studies
BEP 1104	Introduction to Psychology
BEP 1101	Community Services
BEP 1105	Introduction to Social Sciences

Semester Two

BEP 1201	Mathematics and Statistics
BEP 1205	Introduction to Political Science
BEP 1204	Introduction to Educational Leadership and Management
BEP 1206	Sociology
BEP 1203	International Relations
BEP 1202	English for Academic Purposes

FACULTY OF EDUCATION & SOCIAL SCIENCES

Second Year

Semester Three

BEP 2302 Foundation of Education
BEP 2303 Foreign Language-I
BEP 2304 Introduction to Social Psychology
BEP xxxx Major-I
BEP 2305 School Community and Teacher
BEP 2301 Educational Policy and Practice

Semester Four

BEP 2402 Culture, Art and Society
BEP 2404 Statistical Inferences
BEP xxxx Major-II
BEP 2405 Testing and Evaluation
BEP 2401 Classroom Management
BEP 2403 Foreign Language-II

Third Year

Semester Five

BEP xxxx Major-III
BEP xxxx Major-IV
BEP xxxx Major-V
BEP 3501 Ethical Issues in Psychology
BEP 3602 Education for Sustainable Development
BEP 4802 Critical Thinking and Reflective Practices

Semester Six

BEP xxxx Major-VI
BEP xxxx Major-VII
BEP xxxx Major-VIII
BEP 3604 Research Methods
BEP 3603 Ethics and Professional Practices in Education
BEP 3601 Children's Rights: A Global Approach

Fourth Year

Semester Seven

BEP xxxx Major-IX
BEP xxxx Major-X
BEP 4701 Environmental Psychology
BEP 4704 Research Project-I
BEP 4702 Intervention, Organization and Practice
BEP 4703 Sociology of Education

Semester Eight

BEP 4803 Human Resource Management
BEP 4804 Research Project-II
BEP xxxx Major-XI
BEP xxxx Major-XII
BEP 4801 Children and Technology: A Global Perspective
BEP 4805 Social Psychology

MAJOR COURSES

BEP 4114 Diversity and Inclusive Education
BEP 4216 Human Growth and Learning
BEP 4118 Promoting Pro-Social Behavior
BEP 4112 Cognitive Psychology
Bxx 4217 Introduction to Organizational Psychology
BEP 4211 Child Psychology
BEP 4117 Personality Theories
BEP 4115 Guidance and Counselling
BEP 4214 Educational Psychology
BEP 4116 History of Psychology
BEP 4113 Counseling and Psychotherapy
BEP 4212 Community Psychology
BEP 4215 Families School and Community
BEP 4218 Positive Psychology
BEP 4213 Development Psychology
BEP 4111 Abnormal Psychology

Note: Course offering may be varied as per university policy.

MS Educational Leadership and Management (MS ELM)

The MS in Educational Leadership and Management is a 1.5-2 years program. It is 30 credit hours program. There are two streams available for MS. One Stream is Course-Work Based Stream and other one is Research Based Stream. In Course-Work Stream, the student is required to complete 10 courses of 3 credit hours each. In the Research Based Stream, the student is required to complete 8 Courses (24 credit hours) and Two IRS (6 credit hours) OR One Thesis (6 credit hours). In both the streams, 30 credit hours must be completed. The time limit to earn a MS degree is from 1.5 to 4 years.

The students will have the opportunity to specialize in the fields of Sociology of Education, Educational Policy, Testing/Evaluation, Teacher Education, Professional Development, School Administration/Educational Leadership, Guidance & Counseling, and Curriculum Development, Technology Integration in Education, Early Childhood Education, Higher Education Studies, Educational Psychology, and Child Development.

The breakup of 30 credit hours for Research-Based Stream is as follows:

- Two core courses (06 credit hours)
- Six elective courses (18 credit hours)
- Thesis (6 credit hours) or 2 Independent Research Studies (3 credit hours each)

The breakup of 30 credit hours for Coursework Based Stream is as follows:

- Two core courses (06 credit hours)
- Eight elective courses (24 credit hours)
- No IRS or Thesis

First Year

Fall Semester

ELM 5102	Advanced Research Methods and Techniques-I (Qualitative)
ELM 5103	Advanced Research Methods and Techniques-II (Quantitative)
ELM 5xxx	Elective-I
ELM 5xxx	Elective-II

Spring Semester

ELM 5xxx	Elective-III
ELM 5xxx	Elective-IV
ELM 5xxx	Elective-V
ELM 5xxx	Elective-VI

Second Year

Fall Semester

ELM5xxx	Thesis I/ 2 Independent Research Studies

Spring Semester

ELM 5xxx	Thesis II

COMPULSORY COURSES

ELM 5102	Advanced Research Methods and Techniques-I (Qualitative)
ELM 5103	Advanced Research Methods and Techniques-II (Quantitative)

ELECTIVES

ELM 5235	Sociological Issues in Education /Access/Out comes and Quality
ELM 5233	Learning Effectiveness in Higher Education Contexts
ELM 5136	Use of Technology in Education
ELM 5231	Education in the Context of Conflict
ELM 5236	Socio-Politics of Language Policy in Educational Contexts
ELM 5133	Change Management in Education
ELM 5134	Educational Policy and Practice
ELM 5135	Assessment and Evaluation in Education
ELM 5138	School Evaluation and Monitoring
ELM 5131	Teacher Education
ELM 5234	Research Philosophy
ELM 5137	Professional Development and Management in Education
ELM 5232	Finance and Resource Management
ELM 5132	Organizational Development
ELM 5237	Advanced Educational Psychology
ELM 5139	Curriculum Development and Instructional Design
ELM 5238	Educational Leadership Theory and Practices
ELM xxxx	Globalization and Critical Perspectives in Educational Leadership

PhD Educational Leadership and Management (PhD ELM)

The PhD in Educational Leadership and Management program at the Department of Education aspires to meet the growing demand of leaders and managers with expertise in the field of education. There is a strong emphasis on research and critical awareness on issues of social justice and equity in educational contexts. It equips graduates with the knowledge and skills to have impact on educational policy, reform and practice. PhD in Educational Leadership and Management is a 3 year program spread over six semesters. It is a 54 credit hour program comprising 7 courses (21 credit hours), 1 Independent Research Study (3 credit hours), and a Dissertation (30 credit hours).

The students will have the opportunity to specialize in the fields of Sociology of Education, Educational Policy, Testing/Evaluation, Teacher Education, Professional Development, School Administration/Educational Leadership, Guidance & Counselling, Educational Psychology, and Curriculum development, Technology Integration in Education, Early Childhood Education, Higher Education Studies, Educational Psychology and Child Development.

First Year

Fall Semester

ELM 6101 Advanced Research Methods and Techniques-I (Qualitative)
ELM 6102 Advanced Research Methods and Techniques-II (Quantitative)
ELM 6xxx Elective-I

Spring Semester

ELM 6xxx Elective-II
ELM 6xxx Elective-III
ELM 6108 Independent Research Study-I

Second Year

Fall Semester

ELM 6xxx Dissertation

Spring Semester

ELM 6xxx Dissertation

Third Year

Fall Semester

ELM 6xxx Dissertation

Spring Semester

ELM 6xxx Dissertation

Fourth Year

Fall Semester

ELM 6xxx Dissertation

Spring Semester

ELM 6xxx Dissertation

COMPULSORY COURSES

ELM 6101 Advanced Research Methods and Techniques-I (Qualitative)
ELM 6102 Advanced Research Methods and Techniques-II (Quantitative)

ELECTIVES

ELM 6128 Use of Technology in Education
ELM 6221 Education in the Context of Conflict
ELM 6123 Change Management in Education
ELM 6124 Educational Policy and Practice
ELM 6125 Assessment and Evaluation in Education
ELM 6131 Monitoring and Evaluation in Education
ELM 6121 Teacher Education
ELM 6224 Research Philosophy
ELM 6126 Professional Development and Management in Education
ELM 6122 Organizational Development
ELM 6231 Globalization and Critical Perspectives in Educational Leadership
ELM 6229 Case Studies in Educational Psychology
ELM 6129 Case Studies in Educational Leadership
ELM 6228 Curriculum and Instruction: Reflection and Strategies

All the students are required to appear in Comprehensive Examination at the end of their course work.

*The research courses are compulsory for all students except for SZABIST continuing students who will take two elective courses instead.

Note:

1. **HEC has revised Teacher Education Road MAP. Course load and degree duration is being offered as per policy.**
2. **Course offering may be varied as per university policy.**

FACULTY OF MEDIA SCIENCES

In the 21st century, media in all its forms, print, TV, radio, film, video, digital, virtual, and mobile has increasingly saturated all aspects of contemporary life. This proliferation of media presents vast opportunities and poses immense challenges. Our degree programs in Media Sciences are designed to help undergraduate and graduate students participate productively both as practitioners and scholars in this exciting and challenging environment.

Broadly defined, the Media Sciences constitute a field of study that encompasses the history, theory, production, content, and public effects of a variety of media including but not limited to journalism, advertising, photography, radio, film, video, television, design, the internet, digital technologies, and the performing arts. We recognize that studying media requires interdisciplinary thinking. Therefore, by bridging theory and practice and using an interdisciplinary approach, we give our students the skills, knowledge, and flexibility that the increasingly competitive international and national market demands.

The Faculty of Media Sciences at SZABIST offers the following undergraduate and graduate degree programs:

- Bachelor of Media Science
  (Film & TV Production, Advertising Strategy & Design, and Journalism)
- Master of Advertising
- Master of Media Science
  (Media Production and Design,
  Digital Journalism and Global Communication,
  Fashion Media and Digital Communication)

FACULTY OF MEDIA SCIENCES

Bachelor of Media Science

The Faculty of Media Sciences at SZABIST offers a comprehensive 4-year Bachelor of Media Science degree with majors in Film and Television Production, Advertising Strategy & Design, and Journalism.

To earn an undergraduate degree, students must enroll in and successfully complete a total of 136 credit hours which include 44 courses, a 6-credit thesis, and an internship (Forty-four courses include: 34 core courses, 7 from the stream of specialization requirements, i.e. Film and Television production, or Advertising Strategy & Design, or Journalism and 3 electives). All students must complete their degree within 6 years.

First Year

Fall Semester

MD 1122 English for General Purposes
MD 1107 Drawing and Perspective
MD 1115 Introduction to Media Industries
MD XXXX Civilization Studies
MD 1123 Pakistan Studies
MD 1106 Photography

Spring Semester

MD 1222 English for Academic Purposes
MD 1104 Culture, Media and Society
MD 3601 Art of Music
MD 1211 Basic Design
MD 2321 History and Aesthetics of Film
MD 1223 Islamic Studies OR
MD 1224 Humanities (For non-Muslim students)*

Second Year

Fall Semester

MD 2427 Design Practices I
MD 1118 Topics in Asian Literature
MD 2323 Production Practices I
MD 1217 Introduction to Sound
MD 2313 Idea Development
MD 3505 Principles of Journalism

Spring Semester

MD 1119 Play Analysis
MD 2318 History of Commercial Art
MD 2425 Audiovisual Editing
MD xxxx Introduction to Advertising Strategy
MD 3527 Design Practices II
MD 2325 Media Research

Third Year

Fall Semester

MD 2423 Theatre Project
MD 2424 Media Psychology
MD 3523 Production Practices II
MD 2405 Media Laws and Ethics
MD 1213 Creative Writing
MD 3525 Radio Programming and Production

Spring Semester

MD 3518 Animation and Motion Graphics
MD 4701 State and Nation Building in Pakistan
MD 3506 Theories of Visual Culture
MD 4xxx Stream Elective I
MD 4xxx Stream Elective II
MD 4xxx Stream Elective III

Fourth Year

Fall Semester

MD 4807 Thesis I
MD 4714 Producing Short Narratives
MD 4xxx Stream Elective IV
MD 4xxx Stream Elective V
MD 4xxx Stream Elective VI
MD 4xxx Stream Elective VII

Spring Semester

MD 4808 Thesis II
MD 4xxx Open Elective I
MD 4xxx Open Elective II
MD 4xxx Open Elective III

(*Humanities will be offered to the non-Muslim students instead of Islamic Studies)

STREAMS

Film & Television Production Stream

MD 4726 Directing I
MD 4728 Directing II
MD 4781 Sound Design
MD 4821 Cinematography
MD 4825 Screenwriting
MD 4872 Visual Storytelling
MD 4868 Production Practices III
MD 4724 Documentary Vision
MD 4764 Production Design
MD 4765 Basic Lighting

FACULTY OF MEDIA SCIENCES

MD 4829 Screenwriting II
MD 4789 Green Screen Keying and Composition for Production VFX
MD 4889 Narrative and Social Change
MD 4898 Music Score for Film and Television

Advertising Strategy & Design Stream
MD 4723 Advance Animation
MD 4731 Advertising Research
MD 4739 Advertising Design and Concept
MD 4754 Creative Aspect in Advertising
MD 4779 Digital Brand Communication
MD 4835 Consumer Behavior
MD 4843 Campaign Strategy
MD 4846 New Media Advertising
MD 4847 Copywriting
MD 4736 Integrated Marketing Communications
MD 4837 Media Planning
MD 4782 Interaction Design
MD 4787 Digital Design and Publishing
MD 4834 Advertising in Pakistan
MD 4833 Brand Management
MD 4897 Digital Media Planning
MD 4798 Fundamentals of Digital Advertising

Journalism Stream
MD 4757 Feature Writing I
MD 4879 Multimedia Journalism
MD 4864 Investigative Journalism and Crisis Reporting
MD 4877 The International Newsroom
MD 4783 TV Journalism
MD 4859 Introduction to Photojournalism
MD 4839 Reporting the News
MD 4793 Citizen Journalism
MD 4893 Environmental Journalism
MD 4794 Fashion Journalism
MD 4895 Peace Journalism
MD 4795 Reporting of Politics and Governance
MD 4894 Foreign Correspondence
MD 4896 Sports Reporting
MD 4796 Digital Public Relations and Blogging
MD 4797 Introduction to Digital News Reporting

ELECTIVES
MD 4854 Illustration
MD 4732 Typography
MD 4867 Topics in Film and Television
MD 4878 Design for Social Change
MD 4886 Game Design
MD 4883 Urdu Literature in South Asian Cinema
MD 4873 Modernity in Cinema in Bengal
MD 4774 Media Anthropology
MD 4776 Media Convergence and Innovation
MD 4888 Culture and Media in Sindh
MD 4792 Music Production and Design
MD 4892 Music Theory and Performance
MD 4788 Sindh Studies

Electives and majors will be offered depending on the availability of resources.

Certain film and video production courses may require additional fees for equipment rental, film purchases, and travel. The Faculty of Media Sciences makes every effort to subsidize these costs in order to minimize financial impact on students.

Students enrolled full time are required to take at least 5 courses in each semester. Students unable to enroll full time should consult the Head of the Department and the Program Manager to discuss any accommodation they might need.

All first semester students are required to enroll in 6 courses. In order to register for thesis credits in the 7th and 8th semester for Thesis I and II respectively, students must complete all pre-requisites. Students on academic probation will not be allowed to register for thesis credits.

Internship
The Faculty of Media Sciences requires all students to complete a 6-week internship at an organization of their choice by the end of their third year. Upon completion of the internship, students must submit a comprehensive summary of what they learned following their internship.

All students are also required to work with the faculty to organize faculty's annual media festival in the third year of their degree.

FACULTY OF MEDIA SCIENCES

Master of Advertising

The Faculty of Media Sciences at SZABIST offers an evening, one year Master's degree program in Advertising, providing students, a comprehensive training through courses that prepare them to engage in various career options in the advertising industry. To be awarded a Master of Advertising degree, students need to complete total of 30 credit hours (10 courses), which includes 7 core courses (21 credits hours), and 3 electives (9 credit hours).

All students must complete their degree within four years.

First Year

Fall Semester

MD 5168	Research Methods in Advertising
MD 5164	History of Communication and Advertising
MD 5166	Ideation Techniques in Advertising
MD 5167	Principles of Advertising
MD 5268	Creative Advertising Campaigns

Spring Semester

MD 5xxx	Advanced Integrated Marketing Communication
MD 5xxx	Advanced Media Planning and Strategy
MD 5xxx	Elective I
MD 5xxx	Elective II
MD 5xxx	Elective III

ELECTIVES

MD 5351	Campaign Strategy
MD 5264	Copywriting and Advertising Conceptualization
MD 5265	Digital Advertising
MD 5272	Advanced Integrated Marketing Communication
MD 5352	New Media Advertising
MD 5273	Strategic Brand Management
MD 5275	Strategic Creative Development
MD 5353	Media Planning and Strategy
MD 5274	Consumer Engagement
MD 5271	Advertising Account Management

Electives will be offered depending on the availability of the resources.

Master of Media Science (MMS)

Faculty of Media Sciences offers an evening, 18 months Master's degree in Media Science. Students enrolling in this program will be offered to select any one of the 3 streams of specialization;

Media Production and Design Stream	Fashion Media and Digital Communication Stream	Digital Journalism and Global Communication Stream
Primarily for media professionals and middle management of production houses and teams engaged in media houses, and are hampered in their careers because of lack of knowledge and understanding of production technique skills	This stream is for professionals who want to join the growing Fashion media and merchandising industry in Pakistan, in addition to courses that help in managing public relations and communication strategy of companies and nonprofits.	Journalism Stream is offered for all who want to develop an in-depth understanding of journalistic practices and are interested in specializing in analytical skills related to both print and electronic media.

The three elective choices offered in the 2nd semester (Spring) will determine the stream. In addition to the three specializations offered students are at liberty in choosing their path of academic research related to praxis; through course work, or Thesis (For those students who are interested in following an academic career leading to a doctorate).

In Spring Semester, students decide on their respective chosen stream; the choice of Electives varies according to the three options offered to students. Specialization Streams Offered: Media Production and Design, Digital Journalism and Global Communication, Fashion Media and Digital Communication.

FACULTY OF MEDIA SCIENCES

To be awarded a Master of Media Science degree, students need to complete a total of 30 credit hours. Students can finish their degree program by pursuing one of the two available options:

Masters by Course Work
30 Credit hours (10 courses), which includes 4 core courses (12 credit hours), 6 electives (18 credit hours).

Masters by Thesis
30 Credit hours (10 courses), which includes 4 core courses (12 credit hours), 4 electives (12 credits hours), Thesis I & Thesis II (6 credit hours).

All students must complete their degree within four years.

First Year

Fall Semester

MMS 5101	Applied Media Research
MMS 5102	Digital Culture and Society
MMS 5103	Media Evolution and Innovation
MMS 5104	Media Theories and Application

Spring Semester

MMS 5xxx	Elective I
MMS 5xxx	Elective II
MMS 5xxx	Elective III
MMS 5209	Thesis I/MMS 5xxx Elective

Second Year

Fall Semester

MMS 5xxx	Elective IV
MMS 5309	Thesis II/MMS 5xxx Elective

ELECTIVES

Media Production and Design Stream:

MMS 5431	Urban Geographies and Visual Cultures
MMS 5433	Camera and Lights
MMS 5436	Film Analysis
MMS 5439	Story Telling and Screenplay Writing
MMS 5435	Documentary Making
MMS 5434	Directing
MMS 5441	Theories of Film and Television
MMS 5432	Aesthetics of Films
MMS 5438	Production Management
MMS 5442	Theories of Visual Culture and Film
MMS 5437	New Media Production

Fashion Media and Digital Communication Stream:

MMS 5339	Interaction Design for Fashion Industry
MMS 5336	Fashion Design Trends
MMS 5334	E-commerce for Fashion
MMS 5332	Digital Media and Fashion Industry
MMS 5341	Social Media and Online Communication
MMS 5331	Digital Fashion Illustration
MMS 5337	Fashion Photography
MMS 5335	Fashion Advertising
MMS 5338	Fashion Public Relations
MMS 5333	Digital Visual Communication

Digital Journalism and Global Communication Stream:

MMS 5237	Global Journalism
MMS 5231	Beat Reporting
MMS 5238	Investigative Journalism
MMS 5243	Multi-Format News Reporting
MMS 5232	Data Journalism
MMS 5235	Fashion and Entertainment Journalism
MMS 5241	Media and Post-Colonialism
MMS 5242	Media, Politics and Governance
MMS 5239	Issues in International Media
MMS 5234	Digital Journalism
MMS 5236	Global Communication
MMS 5233	Development Communication

Electives will be offered depending on the availability of resources.

FACULTY OF LIFE SCIENCES

SZABIST's Life Sciences programs are designed to give students a sound and broad academic base for a professional and rewarding career in biological and health care fields. It blends theoretical and practical knowledge, critical thinking and real life experience to equip students with skills and offers the opportunity to study a broad range of disciplines in biological and health sciences, which includes Biochemistry, Physiology, Microbiology, Biotechnology, Molecular Biology & Pharmacology.

PROGRAM & FACULTY

Life Sciences programs aim to produce professionals with firm knowledge of fundamental concepts of Biology, Health Sciences and their current applications. The BS, MS, MSPH & PhD programs intend to provide training in the fundamentals of ever-changing fields of Public Health and Life Sciences.

Upon completion, students will have a broad knowledge of biological sciences and other related disciplines with high level of understanding and appreciation in certain specialized areas including cell and tissue culture techniques, biochemical and physiological understanding of microbes and higher organisms, genetic manipulations, drug design and therapeutics, advanced analytical techniques and public health care.

Life Sciences faculty includes foreign qualified professionals with relevant expertise and experience in both research and teaching. The faculty is actively engaged in research projects and also provides quality supervision to the students at Life Sciences Research Center (LSRC).

FACULTY OF LIFE SCIENCES

Lab Facilities

SZABIST is equipped with hi-tech and state-of-the-art scientific laboratories that conduct research which is at par with international standards. All the laboratories are well-equipped and sufficient to provide the necessary required support to all type of research done by the students and faculty.

Job Placement Possibilities

- Food Industry
- Biochemical Industry
- Biotechnology Companies
- Healthcare Sector (Public Health)
- Diagnostic Labs and Hospital
- Pharmaceutical Industry
- Bioinformatics Software Houses
- Research Centres
- Academia

BS Biosciences

BS Biosciences at SZABIST is a four-year program spread over eight semesters and consists of 136 credit hours of teaching (44 courses), an internship of at least six weeks, and a research report. The maximum time limit to complete the BS degree is six years.

First Year

Fall Semester

BIO 1101	Cell Biology
BIO 1111	English for General Purposes
BIO 1107	Fundamental Mathematics
BIO 2404	Lab Management
BIO 1109	Chemistry
BIO 1115	Islamic Studies / Ethics

Spring Semester

BIO 1104	Introduction to Computing
BIO 1113	Microbiology-I
BIO 2301	Biochemistry-I
BIO 1211	English for Academic Purposes
BIO 1214	Sociology
BIO 1215	Pakistan Studies

Second Year

Fall Semester

BIO 1206	Physiology-I
BIO 1213	Microbiology-II
BIO 1216	Probability and Biostatistics
BIO 2411	English for Professional Purposes
BIO 2401	Biochemistry-II

Spring Semester

BIO 2305	Physiology-II
BIO 3504	Immunology
BIO 4803	Molecular Biology
BIO 2409	Humanities
BIO 3503	Genetics

Third Year

Fall Semester

BIO 2406	Genetic Engineering
BIO 3507	Biotechnology-I
BIO 2405	Hematology
BIO 4801	Bioethics
BIO 3511	Pharmacology
BIO 2306	Psychology

Spring Semester

BIO 2407	Basic Endocrinology
BIO 3607	Biotechnology-II
BIO 3601	Agricultural Science
BIO 2304	Nutrition and Dietetics
BIO 3611	Computer-Aided Drug Design
BIO 4703	Research Methodology

Fourth Year

Fall Semester

BIO 4701	Business Management
BIO 4705	Research Report-I
BIO 2309	Animal and Plant Tissue Culture
BIO 2402	Bioinformatics
BIO 4xxx	Elective-I
BIO 4xxx	Elective-II

Spring Semester

BIO 2403	Environmental Science
BIO 4802	Biophysics
BIO 4805	Research Report-II
BIO 3509	Epidemiology
BIO 4xxx	Elective-III
BIO 4xxx	Elective-IV

FACULTY OF LIFE SCIENCES

ELECTIVES

BIO 4721 Advanced Biochemical Techniques
BIO 4722 Medical Transcription
BIO 4723 Virology
BIO 4822 Nanotechnology
BIO 4725 Advanced Molecular Techniques
BIO 4827 Systems Biology
BIO 4724 Telemedicine
BIO 4823 Stem Cell Research
BIO 4727 Food Biotechnology
BIO 4825 Fermentation Biotechnology
BIO 4726 Applied Enzymology
BIO 4826 Medical Biotechnology
BIO 4728 Techniques in Biotechnology
BIO 4729 Bioprocess Engineering
BIO 4828 Bioenergy
BIO 4829 Infectious Diseases
BIO 4731 Fundamentals of Neuroscience
BIO 4831 Phytochemistry and Natural Medicine
BIO 4xxx Molecular Neurochemistry
BIO 4831 Phytochemistry and Natural Medicine

BS Biotechnology

BS Biotechnology at SZABIST is a four-year program spread over eight semesters and consists of 136 credit hours of teaching (44 courses), an internship of at least six weeks, and a research report. The maximum time limit to complete the BS degree is six years.

First Year

Fall Semester

BTC 1105 Cell Biology
BTC 1106 English for General Purposes
BTC 1103 Mathematics – I
BTC 1101 Biosafety and Bioethics
BTC 1104 Organic Chemistry
BTC 1102 Islamic Studies / Ethics

Spring Semester

BTC 1204 Microbiology
BTC 1201 Biochemistry-I
BTC 1202 English for Academic Purposes
BTC 1206 Inorganic Chemistry
BTC 2304 Introduction to Computer Science
BTC 2407 Pakistan Studies

Second Year

Fall Semester

BTC 1205 Probability and Biostatistics
BTC 2301 Biochemistry-II
BTC 2302 Ecology, Biodiversity and Evolution-I
BTC 2303 English for Professional Purposes
BTC 2305 Microbial Biotechnology
BTC 2306 Physical Chemistry

Spring Semester

BTC 2402 Ecology, Biodiversity and Evolution -II
BTC 2404 Immunology
BTC 2405 Molecular Biology
BTC 1203 Biomathematics
BTC 2401 Classical Genetics
BTC 2406 Genomics and Proteomics

Third Year

Fall Semester

BTC 3508 Sociology
BTC 3504 Introduction to Biotechnology
BTC 3503 Enzymology
BTC 3507 Genetic Resources Conservation
BTC 3506 Psychology

Spring Semester

BTC 3603 Industrial Biotechnology
BTC 3601 Agriculture Biotechnology
BTC 3607 Analytical Chemistry and Instrumentation
BTC 3606 Research Methodology
BTC 3604 Medical Biotechnology

Fourth Year

Fall Semester

BTC 4705 Research Report-I
BTC 4704 Methods in Molecular Biology
BTC 4702 Bioinformatics
BTC 4xxx Elective-I
BTC 4xxx Elective-II
BTC 3505 Principles of Biochemical Engineering

Spring Semester

BTC 4801 Biological Physics
BTC 4805 Research Report-II
BTC 4802 Environmental Biotechnology
BTC 4803 Food Biotechnology
BTC 4xxx Elective-III
BTC 4xxx Elective-IV

FACULTY OF LIFE SCIENCES

ELECTIVES

BTC 4723 Medical Transcription
BTC 4823 Nanotechnology
BTC 4821 Advanced Molecular Techniques
BTC 4825 Virology
BTC 4824 Systems Biology
BTC 4721 Advance Biochemical Techniques
BTC 4724 Stem cell Research
BTC 4725 Telemedicine
BTC 4822 Marine Biotechnology
BTC 4722 Fungal Biotechnology
BTC 4826 Bioprocess Engineering
BTC 4726 Bioenergy
BTC 4827 Infectious Diseases
BTC 4727 Fundamentals of Neuroscience
BTC 4xxx Molecular Neurochemistry
BTC 4828 Phytochemistry and Natural Medicine

Bachelor of Science in Public Health (BS PH)

BS Public Health at SZABIST is a four-year program spread over eight semesters and consists of 130 credit hours of teaching (42 courses), an internship of at least six weeks, and a research report of 6 credit hours. The maximum time limit to complete the BS degree is six years.

First Year

Fall Semester

BPH 1101 Probability and Biostatistics-I
BPH 1102 English for General Purposes
BPH 1103 Life Sciences Biology
BPH 1104 Mathematics
BPH 1105 Sociology of Health and Disease
BPH 2304 Islamic Studies/Ethics

Spring Semester

BPH 1201 Basic Epidemiology
BPH 1202 Probability and Biostatistics-II
BPH 1203 Community Services
BPH 1204 English for Academic Purposes
BPH 1205 Principles of Psychology
BPH 2305 Pakistan Studies

Second Year

Fall Semester

BPH 2301 Basic Computer Skills
BPH 2302 Community Nutrition
BPH 2303 English for Professional Purposes
BPH 2306 Personal Hygiene
BPH 3504 Primary Health Care

Spring Semester

BPH 2401 Medical Anthropology
BPH 2402 Microbiology
BPH 2403 Parasitology
BPH 2404 Professional Ethics
BPH 3602 Epidemiology of Infectious Diseases

Third Year

Fall Semester

BPH 3501 Concept of Health and Disease
BPH 3502 Health Promotion, Advocacy and Social Mobilization
BPH 3503 Population Dynamics
BPH 3505 Community Pediatrics
BPH 3506 Fundamental Principles of Infectious Diseases

Spring Semester

BPH 3601 Environment and Occupational Health
BPH 3603 Health policy and Management
BPH 3604 Non-Communicable Diseases Epidemiology
BPH 3605 Reproductive Health
BPH 3606 Research Methodology

Fourth Year

Fall Semester

BPH 4702 District Health Management
BPH 4703 Health Planning
BPH 4704 Health Professional Education
BPH 4709 Research Report-I
BPH xxxx Elective-I
BPH xxxx Elective-II

Spring Semester

BPH 4801 Entomology
BPH 4803 Health Marketing
BPH 4805 Mental Health
BPH 4809 Research Report-II
BPH xxxx Elective-III
BPH xxxx Elective-IV

FACULTY OF LIFE SCIENCES

ELECTIVES

BPH 4701 Disaster Management
BPH 4705 Quality Management in Health Care
BPH 4721 Adolescent and Sexual Health
BPH 4722 Art and Public Health
BPH 4723 Community Nursing
BPH 4724 Geriatrics
BPH 4725 Health Information System
BPH 4726 Health Inventory Management
BPH 4727 Prison Health
BPH 4728 Risk Management
BPH 4729 School Health
BPH 4802 Health Economics
BPH 4821 Addiction and Social Rehabilitation
BPH 4822 Community Dentistry
BPH 4823 Community Psychiatry
BPH 4824 Food Safety
BPH 4825 Health Financing
BPH 4826 Health Project Management
BPH 4827 Nuclear Medicine
BPH 4828 Sports Medicine

MS Biosciences

MS Biosciences at SZABIST is a two-year program spread over four semesters and consists of 30 credit hours of teaching. The curriculum includes 8 courses of 3 credit hours each and research project (Thesis) of six credit hours or 2 IRS. Students can also take two additional courses in lieu of Thesis in order to complete the total credit hours. The maximum time limit to complete the MS degree is four years.

First Year

Fall Semester

BIO 5101 Advanced Research Methodology
BIO 5102 Biostatistics
BIO 5201 Molecular Genetics
BIO 5202 Techniques in Biomolecules Analyses

Spring Semester

BIO 5xxx Elective-I
BIO 5xxx Elective-II
BIO 5xxx Elective-III
BIO 5xxx Elective-IV

Second Year

Fall Semester

BIO 5xxx Thesis or Elective-V or IRS-I

Spring Semester

BIO 5xxx Thesis or Elective VI or IRS-II

ELECTIVES

BIO 5135 Applied Biotechnology
BIO 5134 Environmental and Industrial Biotechnology
BIO 5138 Plant Biotechnology
BIO 5236 Fermentation Design and Engineering
BIO 5133 Medical Biotechnology
BIO 5234 Biocatalysis and Enzymology
BIO 5235 Clinical Biochemistry
BIO 5136 Drug Discovery and Development
BIO 5131 Biocomputation
BIO 5132 Cancer Biology
BIO 5232 Applied Immunology
BIO 5233 Techniques in Diagnostics
BIO 5238 Molecular Dynamics
BIO 5137 Food Sampling Techniques and Analysis
BIO 5231 Food Quality Management System
BIO 5237 Food Toxicology and Adulteration
BIO 5239 Advanced Analytical Biochemistry
BIO 5141 Gene Expression and Control
BIO 5241 Medical Neuroscience
BIO 5139 Molecular Modeling and Drug Design

FACULTY OF LIFE SCIENCES

MS Biotechnology

MS Biotechnology at SZABIST is a two-year program spread over four semesters and consists of 30 credit hours of teaching. The curriculum includes 8 courses of 3 credit hours each and research project (Thesis) of six credit hours or 2 IRS. Students can also take two additional courses in lieu of Thesis in order to complete the total credit hours. The maximum time limit to complete the MS degree is four years.

First Year

Fall Semester

BTC 5102	Research Methods in Biotechnology
BTC 5101	Biostatistics and Laboratory Mathematics
BTC 5201	Advances in Molecular Genetics
BTC 5202	Recent trends in Molecular Diagnostics

Spring Semester

BTC 5xxx	Elective-I
BTC 5xxx	Elective-II
BTC 5xxx	Elective-III
BTC 5xxx	Elective-IV

Second Year

Fall Semester

BTC 5xxx	Thesis or Elective-V or IRS-I

Spring Semester

BTC 5xxx	Thesis or Elective VI or IRS-II

ELECTIVES

BTC 5122	Bioethics, Biosecurity, Biosafety and Dual Use Education
BTC 5121	Advances in Bioinformatics
BTC 5123	Regulation of Gene Expression
BTC 5223	Protein Engineering and Enzyme Technology
BTC 5222	Metabolic Engineering and Biofuels
BTC 5221	Advances in Health Biotechnology
BIO 5124	Advanced Analytical Biochemistry
BIO 5224	Gene Expression and Control
BIO 5125	Medical Neuroscience
BIO 5225	Molecular Modeling and Drug Design

MS Public Health (MSPH)

MSPH at SZABIST is a two-year program distributed into two streams i.e., MSPH (36 credit hours) and MSPH (60 credit hours). For MSPH (36 credit hours), the curriculum includes 10 courses of 3 credit hours each and a research project (thesis) of 6 credit hours or 2 IRS. (3 credit hours each). All MSPH students can also take two additional courses in lieu of Thesis in order to complete total credit hours. For MSPH (60 credit hours), the curriculum includes 18 courses of 3 credit hours each and a research project (thesis) of 6 credit hours or 2 IRS. The maximum time limit to complete the MSPH degree is four years.

Eligibility criteria for Thesis/IRS is: Completed all courses of first and second semester, Minimum 3 GPA in following courses: Basic Epidemiology and Biostatistics, Research Methods: Quantitative and Qualitative, Overall, 3 CGPA by the end of second semester.

MSPH - (36 Credit Hours)

First Year

Fall Semester

MSP 5104	Social and Behavioral Aspects of Public Health
MSP 5101	Basic Epidemiology and Biostatistics
MSP 5102	Environmental and Occupational Health
MSP 5103	Health Promotion, Advocacy and Social Mobilization

Spring Semester

MSP 5201	Applied Epidemiology and Biostatistics
MSP 5203	Research Methods: Quantitative and Qualitative
MSP 5202	Health System
MSP 5xxx	Elective-I

FACULTY OF LIFE SCIENCES

Second Year

Fall Semester

MSP 5xxx Thesis-I or IRS-I or Elective (Any Track)
MSP 5xxx Elective –II OR
Practicum OR
One Publication in Peer Reviewed Journal (HEC Indexed Journal)

Spring Semester

MSP 5xxx Thesis-II or IRS-II or Elective (Any Track)
MSP 5xxx Elective-III OR
Practicum OR One Publication in Peer Reviewed Journal (HEC Indexed Journal)

MSPH — (60 Credit Hours)

First Year

Fall Semester

MSP 5101 Basic Epidemiology and Biostatistics
MSP 5104 Social and Behavioral Aspects of Public Health
MSP 5105 Mental Health
MSP 5106 Population Dynamics
MSP 5107 Professional Ethics

Spring Semester

MSP 5201 Applied Epidemiology and Biostatistics
MSP 5203 Research Methods: Quantitative and Qualitative
MSP 5205 Health Care Risk Management
MSP 5206 Microbiology
MSP 5207 Parasitology

Second Year

Fall Semester

MSP 5102 Environmental and Occupational Health
MSP 5103 Health Promotion, Advocacy and Social Mobilization
MSP 5111 Sociology of Health and Disease
MSP 5202 Health System
MSP 5xxx Thesis-I or IRS-I or Elective (Any Track)

Spring Semester

MSP 5204 Entomology
MSP 5xxx Thesis-II or IRS-II or Elective (Any Track)
MSP 5xxx Elective-I
MSP 5xxx Elective-II
MSP 5xxx Elective-Ill
Practicum OR One Publication in Peer Reviewed Journal (HEC Indexed Journal)

Elective Courses/Tracks

Track 1: Epidemiology and Biostatistics

MSP 5223 Advanced Epidemiology and Biostatistics
MSP 5224 Epidemiological Report Writing
MSP 5321 Epidemiology of Communicable and Non Communicable Diseases
MSP xxxx Survey Sampling
MSP xxxx Behavioral and Mental Health Epidemiology
MSP xxxx Application of Health Informatics

Track 2: Health Policy, Management and Economics

MSP 5323 Human Resource Management for Health
MSP 5222 Health Policy, Planning and Management
MSP 5226 Financial Management
MSP 5225 Advanced Health Economics
MSP 5322 Health Care Financing
MSP 5324 Supply Chain Management

Track 3: Applied Nutrition and Reproductive Health

MSP 5327 Nutrition for Children, Adolescent and Mothers
MSP 5228 Community Management of Malnutrition
MSP 5227 International Food Organizations
MSP 5325 Global Demography in Public Health
MSP 5221 Community Based RH Interventions
MSP 5326 Gender Development

FACULTY OF LIFE SCIENCES

PhD Biosciences

The PhD in Biosciences is minimum 3 years program that requires completing a total of 48 credit hours. The maximum time limit to complete the PhD degree is 8 years. Maximum course load for a semester is 3 courses (9 credit hours).

The following is the break-up of the 48-credit hour courses:

- 2 Core Courses (6 credit hours) *
- 4 Elective (12 credit hours) OR 1 IRS (3 credit hours) and 3 Electives (9 credit hours)
- 1 Thesis (30 credit hours)

* The research courses are compulsory for all the students except for SZABIST continuing students who will take two elective courses instead.

First Year

Fall Semester

BIO 6101 Statistical Tools for Research
BIO 6201 Research Methodology
BIO 6xxx Elective-I

Spring Semester

BIO 6xxx Elective-II
BIO 6xxx Elective-III
BIO 6xxx Elective-IV/IRS-I

Second Year

Fall Semester

BIO 6xxx Dissertation

Spring Semester

BIO 6xxx Dissertation

Third Year

Fall Semester

BIO 6xxx Dissertation

Spring Semester

BIO 6xxx Dissertation

Interdisciplinary courses can be allowed with the approval of both the Program Managers subject to the relevance of courses. Elective courses may vary from time to time.

Followed by successfully completion of the course work, Comprehensive Examination is required to pass in order to acquire PhD candidacy after which research period starts. The entire research work is carried out under the supervision of the PhD supervisor which is assigned and approved as per the university procedure. The complete research work is required to be submitted in the form of a "Dissertation" after a minimum period of two years.

Electives

BIO 6121 Advances in Molecular Genetics
BIO 6124 Computational and Systems Biology
BIO 6221 Advanced Immunology
BIO 6222 Next Generation Sequencing Techniques
BIO 6123 Analytical Techniques for Biomolecules
BIO 6122 Advances in Plant Biotechnology
BIO 6125 Oncobiology
BIO 6226 Recombinant DNA Technology
BIO 6225 Food Science and Technology
BIO 6224 Cell Signaling Mechanisms
BIO 6223 Biomaterials Science and Engineering
BIO 6126 Principles of Synthetic Biology

INTERNATIONAL PROGRAMS

LAW PROGRAMS

Bachelor of Laws (LLB) - University of London, UK

Certificate of Higher Education in Common Law (CertHE)

LAW PROGRAMS

LLB

The University of London is a world renowned provider of legal education. For over 150 years the university has not only provided the first step on a career path for many thousands of practicing lawyers within the Commonwealth and around the world, but has also provided many thousands more with the vital transferable skills of a world class legal qualification, enabling them to thrive in many other professions. Academic direction for Undergraduate Laws is provided by a consortium of outstanding University of London Law Schools: Birkbeck, King's College London, London School of Economics and Political Science (LSE), Queen Mary University of London, SOAS, and UCL.

On successful completion of your studies you will receive a University of London award. Your Diploma will state that you were registered with the University of London and that your examinations were conducted by the University of London Law Schools.

Find out more about the University of London at: london.ac.uk/llb

Certificate of Higher Education in Common Law (CertHE)

Certificate of Higher Education in Common Law (CertHE) is a qualification in its own right that also provides an entry route to degree-level study.

It is ideal if you are ready to study for a degree but do not have the qualifications usually required to enter.

INTERNATIONAL PROGRAMS

Bachelor of Laws (LLB)

Entrance Requirements

Standard Entry LLB (3-6) Years

To be eligible to register for the LLB, a student must normally be at least 17 years of age at the time of registration and have passes in:

- Either two subjects at GCE A level, and at least three further subjects at GCSE or GCE O level (at not less than grade C)

Or

Three subjects at GCE A level (with one A Level at not less than grade D)

Or

Three subjects at GCE A level, and one further subject at GCSE or GCE O Level (at not less than grade C)

Or

Two subjects at GCE A Level and two further subjects at AS Level.

Overlapping subjects in O Levels and in A Levels will not be counted.

Graduate Entry LLB (2-6) Years

- Bachelor's degree in any discipline (awarded by an institution acceptable to the University of London).
- A 4-year bachelor's degree (in any discipline) awarded by an institution acceptable to University of London may register for LLB degree under the Graduate Entry Route. Students who register via this route are only required to complete 9 courses (instead of 12) for the LLB degree.
- A 2 year bachelor's degree and a Master's degree (in any discipline) awarded by institutions acceptable to University of London may register for LLB degree under the Graduate Entry Route. Students who register via this route are only required to complete 9 courses (instead of 12) for the LLB degree.

A test of proficiency in English may be required as per University of London's guidelines.

INTERNATIONAL PROGRAMS

LLB Structures

Standard Entry LLB (3-6 years)

As a Standard Entry student you must register for Legal Systems and Method in your first year of study.

Standard Entry Route – Qualifying Law Degree

Level 4

Four compulsory modules

Contract Law
Criminal Law
Legal Systems and Method
Public Law

Level 5

Three compulsory modules

EU Law
Property Law
Tort Law

*One optional module chosen from:

Administrative Law
Commercial Law

Level 6

Two compulsory modules

Equity and Trusts
Jurisprudence and Legal Theory

*Two optional modules chosen from:

International Protection of Human Rights
Criminology
Company Law
Intellectual Property
Introduction to Islamic Law

Graduate Entry LLB (2-6 years)

- If you have already completed a first degree then you may be eligible for the Graduate Entry LLB. This means that you will only have to study 9 modules rather than 12 to complete the LLB. Eligibility for Graduate Entry is at the discretion of the University.

- You must pass the online course, ''Law skills for Graduates'', before completing registration. This course is compulsory for all Graduate Entry students and is designed to prepare you for legal study through the development of legal skills in the context of learning about key aspects of the legal system. The course is made up of four units and a final multiple choice test, and notionally can be completed in 10 hours.

Graduate Entry Route – Qualifying Law Degree

Level 4

Three compulsory modules

Contract Law
Criminal Law
Public Law

Level 5

Three compulsory modules

EU Law
Property Law
Tort Law

Level 6

Two compulsory modules

Equity and Trusts
Jurisprudence and Legal Theory

*One optional modules chosen from:

Alternative Dispute Resolution
Company Law
Intellectual Property
Evidence Law
Introduction to Islamic Law

* Subject to the minimum enrolment of ten students.

INTERNATIONAL PROGRAMS

Certificate of Higher Education in Common Law (CertHE)

Certificate of Higher Education in Common Law (CertHE) is a qualification in its own right that also provides an entry route to degree-level study.

It is ideal if you are ready to study for a degree but do not have the qualifications usually required to enter. SZABIST now offers an opportunity to students with Intermediate (HSC) backgrounds or O/A Level grades short of the requirement for LLB to start with the UoL Law Degree as CertHE in Year One and those willing to continue can transfer to the LLB thereon and can complete the LLB in a total of three years.

CertHE Common Law students will take the same 4 modules that are a part of the 1st year course of the LLB. The only difference is that the CertHE students will receive additional tuitions in English Language and Study Skills to support them with the precisions of the course.

CertHE STRUCTURE

CertHE in Common Law
Four Modules
Contract Law
Criminal Law
Legal Systems and Method
Public Law

With Additional English Writing Course

Admission Requirements

To be eligible to register for this LLB program, you must be at least 18 years of age and one of the following should be applicable:

- Pass in Intermediate with minimum 55% in total OR
- 6 passes in GCE O-Level

English Language Requirements

A test of proficiency in English may be required as per University of London's guidelines.

If you fulfil the criteria, you must also pass the University of London online test and interview conducted at SZABIST to be able to register.

INTERNATIONAL PROGRAMS

BA (Hons) in Business Studies

SZABIST offers a 2+1 Top–up program BA (Hons) in Business Studies from the Coventry University, UK. Student will have to complete 27 courses/81 credits and proceed ahead to Coventry University to earn an International Degree. It is compulsory for students to complete 27 courses before they continue the third year at Coventry University, UK.

CILT (UK) Level 5 Professional Diploma in Logistic & Transport

SZABIST, as an accredited Training Provider of the Chartered Institute of Logistics and Transport International, is offering International Professional Diploma (Level 5) in Logistics and Transport course designed to support professionals in the transportation, supply of inputs and outputs, and storage sectors.

The Chartered Institute of Logistics & Transport (CILT) is the leading international professional body for supply chain, logistics, and transport and encourages its development globally. Its objective is to encourage the Art and Science of Logistics and Transport.

INTERNATIONAL PROGRAMS

BA (Hons) in Business Studies

Admission Requirements
The candidate must have completed O-Levels (minimum 8 subjects including 5 compulsory subjects; English, Urdu, Maths, Islamiat & Pakistan Studies) and A-levels (minimum 3 Subjects)/12th Grade/Intermediate with minimum 50% marks or equivalent from a recognized institution.

Equivalency from Inter Board Committee of Chairmen (IBCC) is required for O & A Levels/High School Diploma/IB Diploma or equivalent.

First Semester

BA 1101	Introduction to Accounting
BA 1102	Microeconomics
BA 1103	Introduction to Computers
BA 1104	Personal Management
BA 1206	Oral Communication and Presentation Skills
BA 1204	Maths for Business

Second Semester

BA 1201	Financial Accounting
BA 1202	Macroeconomics
BA 1203	Management Principles
BA 1105	English Writing Skills
BA 2305	Statistics and Mathematics for Business
BA 2312	Human Behaviour

(Summer)

BA 2301	Introduction to Business Finance
BA 2302	Graphic Design in Multimedia Presentations

Third Semester

BA 2303	Marketing Principles
BA 2304	Managerial Accounting
BA 2315	Introduction to Social Sciences
BA 2403	Business Ethics
BA 3504	Organizational Behavior
BA 3605	Statistical Inference

Fourth Semester

BA 3505	Quantitative Skills
BA 3601	Financial Management
BA 3602	Marketing Management
BA 4704	Management Information Systems
BA 4721	Advertising
BA 4801	Law and Taxation

All courses may not be offered every year. Alternate courses may be substituted as and when required.

INTERNATIONAL PROGRAMS

CILT (UK) Level 5 Professional Diploma in Logistic & Transport

SZABIST, as an accredited Training Provider of the Chartered Institute of Logistics and Transport International, is offering International Professional Diploma (Level 5) in Logistics and Transport course designed to support professionals in the transportation, supply of inputs and outputs, and storage sectors. The Chartered Institute of Logistics & Transport (CILT) is the leading international professional body for supply chain, logistics, and transport and encourages its development globally. Its objective is to encourage the Art and Science of Logistics and Transport.

What Is CILT (UK) Level 5 Professional Diploma in Logistic & Transport Designed For?

The Level 5 Professional Diploma is designed for professionals already working within the Supply Chain, logistics, and transport sectors. It is most suited to those who are aspiring to middle management positions in specialist functional areas such as supply chain management, transport planning, or transport operations. The Diploma is also suitable for graduates in other disciplines who are entering the sector for the first time.

What Will I Learn?

The Diploma qualification comprises 5 Units (Courses). However, SZABIST is offering 6 tailored courses out of which the students can opt for any 5 Units.

List Of Units (Courses):

- Strategic Warehousing Management
- Strategic Procurement in SCM
- Supply Chain Operations
- Green Logistics
- Dynamics of Logistics & Distribution
- Supply Chain Finance

What Are The Benefits Of the CILT(UK) Professional Diploma?

CILT (UK) Qualifications Are Developed To The Highest Standards, Offering Valuable Professional Recognition All Over The World. The Courses Are Relevant To Industry And Government. CILT Qualification Provides A Strong Head Start In Terms Of Most Updated Logistic And Transport Techniques And In Career Development.

What Is The Time Commitment?

Students will complete the qualification within one academic year; i.e., two semesters. The guided learning hours are set at 400 hours, which includes classroom, fieldwork, and self-study. This is allocated as 80 hours per unit for a minimum of 5 units. The program is held in the evening.

ACADEMIC CALENDAR 2023-24 (Karachi Campus)

ACADEMIC CALENDAR 2023-24 (Karachi Campus)

FALL 2023

WEEK	COMMENTS
1	Course Registration
2	IS Thesis Advisors Meeting
3	
4	
5	Teaching Evaluation
6	Teaching Evaluation
7	
8	Mid-Term Exams
9	
10	
11	Last Week to Withdraw from Courses
12	
13	
14	
15	
16	Dead Week
17	Final Exam Week
18	Final Exam Week
	New Faculty Meeting/Orientation
	IS Thesis Advisors Meeting
	Comprehensive Exam
	Independent Research Study Presentations of MS/PhD students

Classes Commencement Date

Karachi Campus:
Hyderabad Campus:
Larkana Campus:
Islamabad Campus:
Dubai Campus:

ACADEMIC CALENDAR 2023-24 (Karachi Campus)

ACADEMIC CALENDAR 2023-24(Karachi Campus)

SPRING 2024

WEEK	COMMENTS
1	Course Registration
2	
3	
4	
5	Teaching Evaluation
6	Teaching Evaluation
7	
8	Mid-Term Exams
9	
10	
11	Last Week to Withdraw from Courses
12	
13	
14	
15	
16	Dead Week
17	Final Exam Week
18	Final Exam Week
	New Faculty Meeting/Orientation
	Independent Research Study Presentations of MS/PhD students
	Comprehensive Exam

Classes Commencement Date

Karachi Campus:
Larkana Campus:
Islamabad Campus:
Dubai Campus:
Hyderabad Campus:

CAMPUS WISE PROGRAMS OFFERING (FALL 2023)

PROGRAMS OFFERING AT DIFFERENT CAMPUSES OF SZABIST (FALL 2023)

PROGRAMS	CAMPUS				
	Karachi	Islamabad	Larkana	Hyderabad	Dubai
Bachelor of Business Administration (BBA)	✓	✓	✓	✓	✓
BA (Hons.) in Business Studies (BABS)	✓				
BS Accounting & Finance	✓	✓	✓	✓	
BS (Accounting & Finance) 2.5 Years ICAP/CAF Qualified	✓				
BS Entrepreneurship	✓				
BS Computer Science	✓	✓	✓	✓	✓
BS Artificial Intelligence	✓	✓			
BS Software Engineering	✓	✓		✓	
Bachelor of Media Science	✓	✓			
BS Social Sciences	✓	✓	✓	✓	
BE Mechatronic Engineering	✓				
BS Biosciences	✓				
BS Biotechnology	✓				
BS Educational Psychology	✓				
BS Public Health	✓		✓		
Bachelor of Law (LLB)	✓				
Certificate of Higher Education in Common Law (CertHE)	✓				
CILT (UK) Level 5 Professional Diploma in Logistic & Transport	✓				
Master in Business Administration (MBA)	✓	✓	✓	✓	✓
Executive MBA	✓	✓			✓
Masters in Project Management	✓	✓	✓		✓
Professional MBA		✓			
Masters in Human Resource Management		✓			
Master of Advertising	✓				
MS Public Health (MSPH)	✓		✓		
MS Biosciences	✓				
MS Biotechnology	✓				
MS Computer Science	✓	✓		✓	✓
MS (CS) with specialization in Core Computing	✓				
MS (CS) with specialization in Software Engineering	✓	✓			✓
MS (CS) with specialization in Networks & Security	✓	✓			✓
MS Cyber Security	✓	✓			
Master of Media Science	✓	✓			
MS Management Science	✓	✓	✓	✓	
MS (Business Analytics)		✓			
MS Developmental Studies		✓			
MS Mechatronic Engineering	✓				
MS Data Sciences	✓	✓			
MS Educational Leadership and Management	✓		✓		
MS Project Management	✓	✓			
MS Social Sciences	✓	✓			
MS (SS) with specialization in Economics	✓	✓			
MS (SS) with specialization in Psychology	✓	✓			
MS (SS) with specialization in Clinical Psychology		✓			
MS (SS) with specialization in Sociology	✓	✓			
MS (SS) with specialization in International Relations	✓	✓			
PhD Social Sciences	✓				
PhD (SS) with specialization in Economics	✓				
PhD (SS) with specialization in Psychology	✓				
PhD (SS) with specialization in Sociology	✓				
PhD (SS) with specialization in International Relations	✓				
PhD Computing	✓	✓			
PhD Management Sciences	✓	✓			
PhD Biosciences	✓				
PhD Educational Leadership and Management	✓				

We just Don't Work Hard
We Work Smart

Disclaimer
This prospectus is only informational and should not be taken as binding on the institute. The institute, therefore, reserves the right to change any rule, regulation and guideline applicable to the program and the student whenever it is deemed appropriate or necessary, and it will be binding on all continuing and new students for all programs at all campuses.

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